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DIRECTOR



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Alabama Department of Environmental Management
adem.alabama.gov

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January 30, 2018

Roy Baggett
Manager of Environmental Affairs
Sanders Lead Company
100 Sanders Road
Troy, Alabama 36081

Re: Major Source Operating Permit Renewal
Facility No.: 210-0005

Dear Mr. Baggett:

The enclosed Major Source Operating Permit Renewal is issued pursuant to the Department's air pollution control rules and regulations. Please note the conditions which must be observed in order to retain the permit.

Two annual compliance certifications (ACC) are required to be submitted. The first ACC demonstrating compliance with the Title V permit issued November 9, 2012 should cover the reporting period from November 9, 2017 through January 29, 2018 and be submitted on or before March 31, 2018. The second ACC demonstrating compliance with the attached Title V permit renewal should cover the reporting period from January 30, 2018 through January 29, 2019 and be submitted on or before March 31, 2019. Subsequent reports should cover the reporting period from January 30th of the current year through January 29th of the following year and be submitted by March 31st.

A Major Source Operating Permit has a term of five (5) years. A renewal application should be submitted to the Department at least six (6) months but not greater than eighteen months prior to its expiration date.

If you have any questions or require clarification of permit conditions, please write or call Jennifer Youngpeter at (334) 270-5676 in Montgomery.

Sincerely,

A handwritten signature in black ink, appearing to be "RWG", is written over a faint, larger signature that is partially obscured.

Ronald W. Gore, Chief
Air Division

RWG/jsy

Birmingham Branch
110 Vulcan Road
Birmingham, AL 35209-4702
(205) 942-6168
(205) 941-1603 (FAX)

Decatur Branch
2715 Sandlin Road, S.W.
Decatur, AL 35603-1333
(256) 353-1713
(256) 340-9359 (FAX)



Mobile Branch
2204 Perimeter Road
Mobile, AL 36615-1131
(251) 450-3400
(251) 479-2593 (FAX)

Mobile-Coastal
3664 Dauphin Street, Suite B
Mobile, AL 36608
(251) 304-1176
(251) 304-1100 (FAX)



MAJOR SOURCE OPERATING PERMIT

PERMITTEE: SANDERS LEAD COMPANY
FACILITY NAME: SANDERS LEAD COMPANY
FACILITY/PERMIT NO.: 210-0005
LOCATION: TROY, PIKE COUNTY, ALABAMA

In accordance with and subject to the provisions of the Alabama Air Pollution Control Act of 1971, as amended, Ala. Code 1975, §§22-28-1 to 22-28-23 (2006 Rplc. Vol. and 2007 Cum. Supp.) (the "AAPCA") and the Alabama Environmental Management Act, as amended, Ala. Code 1975, §§22-22A-1 to 22-22A-15, (2006 Rplc. Vol. and 2007 Cum. Supp.) and rules and regulations adopted thereunder, and subject further to the conditions set forth in this permit, the Permittee is hereby authorized to construct, install and use the equipment, device or other article described above.

Pursuant to the Clean Air Act of 1990, all conditions of this permit are federally enforceable by EPA, the Alabama Department of Environmental Management, and citizens in general. Those provisions which are not required under the Clean Air Act of 1990 are considered to be state permit provisions and are not federally enforceable by EPA and citizens in general. Those provisions are contained in separate sections of this permit.

Issuance Date: JANUARY 30, 2018
Effective Date: JANUARY 30, 2018
Expiration Date: JANUARY 29, 2023

Alabama Department of Environmental Management

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General Permit Provisos

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<p>1. <u>Transfer</u></p> <p>This permit is not transferable, whether by operation of law or otherwise, either from one location to another, from one piece of equipment to another, or from one person to another, except as provided in Rule 335-3-16-.13(1)(a)5.</p> <p>2. <u>Renewals</u></p> <p>An application for permit renewal shall be submitted at least six (6) months, but not more than eighteen (18) months, before the date of expiration of this permit. The source for which this permit is issued shall lose its right to operate upon the expiration of this permit unless a timely and complete renewal application has been submitted within the time constraints listed in the previous paragraph.</p> <p>3. <u>Severability Clause</u></p> <p>The provisions of this permit are declared to be severable and if any section, paragraph, subparagraph, subdivision, clause, or phrase of this permit shall be adjudged to be invalid or unconstitutional by any court of competent jurisdiction, the judgment shall not affect, impair, or invalidate the remainder of this permit, but shall be confined in its operation to the section, paragraph, subparagraph, subdivisions, clause, or phrase of this permit that shall be directly involved in the controversy in which such judgment shall have been rendered.</p> <p>4. <u>Compliance</u></p> <p>(a) The permittee shall comply with all conditions of ADEM Admin. Code 335-3. Noncompliance with this permit will constitute a violation of the Clean Air Act of 1990 and ADEM Admin. Code 335-3 and may result in an enforcement action; including but not limited to, permit termination, revocation and reissuance, or modification; or denial of a permit renewal application by the permittee.</p> <p>(b) The permittee shall not use as a defense in an enforcement action that maintaining compliance with conditions of this permit would have required halting or reducing the permitted activity.</p> <p>5. <u>Termination for Cause</u></p> <p>This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and</p>	<p>Rule 335-3-16-.02(6)</p> <p>Rule 335-3-16-.12(2)</p> <p>Rule 335-3-16-.05(e)</p> <p>Rule 335-3-16-.05(f)</p> <p>Rule 335-3-16-.05(g)</p> <p>Rule 335-3-16-.05(h)</p>

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<p>reissuance, or termination, or of a notification of planned changes or anticipated noncompliance will not stay any permit condition.</p>	
<p>6. <u>Property Rights</u></p>	
<p>The issuance of this permit does not convey any property rights of any sort, or any exclusive privilege.</p>	Rule 335-3-16-.05(i)
<p>7. <u>Submission of Information</u></p>	
<p>The permittee must submit to the Department, within 30 days or for such other reasonable time as the Department may set, any information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. Upon receiving a specific request, the permittee shall also furnish to the Department copies of records required to be kept by this permit.</p>	Rule 335-3-16-.05(j)
<p>8. <u>Economic Incentives, Marketable Permits, and Emissions Trading</u></p>	
<p>No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.</p>	Rule 335-3-16-.05(k)
<p>9. <u>Certification of Truth, Accuracy, and Completeness:</u></p>	
<p>Any application form, report, test data, monitoring data, or compliance certification submitted pursuant to this permit shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.</p>	Rule 335-3-16-.07(a)
<p>10. <u>Inspection and Entry</u></p>	
<p>Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized representatives of the Alabama Department of Environmental Management and EPA to conduct the following:</p>	Rule 335-3-16-.07(b)
<p>(a) Enter upon the permittee's premises where a source is located or emissions-related activity is conducted, or where records must be kept pursuant to the conditions of this permit;</p>	

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<ul style="list-style-type: none"> (b) Review and/or copy, at reasonable times, any records that must be kept pursuant to the conditions of this permit; (c) Inspect, at reasonable times, this facility's equipment (including monitoring equipment and air pollution control equipment), practices, or operations regulated or required pursuant to this permit; (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or other applicable requirements. 	
<p>11. <u>Compliance Provisions</u></p> <ul style="list-style-type: none"> (a) The permittee shall continue to comply with the applicable requirements with which the company has certified that it is already in compliance. (b) The permittee shall comply in a timely manner with applicable requirements that become effective during the term of this permit. 	<p>Rule 335-3-16-.07(c)</p>
<p>12. <u>Compliance Certification</u></p> <p>A compliance certification shall be submitted annually within 60 days of the effective date of this permit.</p> <ul style="list-style-type: none"> (a) The compliance certification shall include the following: <ul style="list-style-type: none"> (1) The identification of each term or condition of this permit that is the basis of the certification; (2) The compliance status; (3) The method(s) used for determining the compliance status of the source, currently and over the reporting period consistent with Rule 335-3-16-.05(c) (Monitoring and Recording Keeping Requirements); (4) Whether the method(s) or other means used to assure compliance provided continuous or intermittent data; (5) Such other facts as the Department may require to determine the compliance status of the source; 	<p>Rule 335-3-16-.07(e)</p>

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<p>(b) The compliance certification shall be submitted to:</p> <p style="text-align: center;">Alabama Department of Environmental Management Air Division P.O. Box 301463 Montgomery, AL 36130-1463</p> <p style="text-align: center;">and to:</p> <p style="text-align: center;">Air and EPCRA Enforcement Branch EPA Region IV 61 Forsyth Street, SW Atlanta, GA 30303</p>	
<p>13. <u>Reopening for Cause</u></p> <p>Under any of the following circumstances, this permit will be reopened prior to the expiration of the permit:</p> <p>(a) Additional applicable requirements under the Clean Air Act of 1990 become applicable to the permittee with a remaining permit term of three (3) or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which this permit is due to expire.</p> <p>(b) Additional requirements (including excess emissions requirements) become applicable to an affected source under the acid rain program. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into this permit.</p> <p>(c) The Department or EPA determines that this permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of this permit.</p> <p>(d) The Administrator or the Department determines that this permit must be revised or revoked to assure compliance with the applicable requirements.</p>	<p>Rule 335-3-16-.13(5)</p>
<p>14. <u>Additional Rules and Regulations</u></p> <p>This permit is issued on the basis of Rules and Regulations existing on the date of issuance. In the event additional Rules and Regulations are adopted, it shall be the permit holder's responsibility to comply with such rules.</p>	<p>§22-28-16(d), <u>Code of Alabama 1975</u>, as amended</p>

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<p>15. <u>Equipment Maintenance or Breakdown</u></p> <p>(a) In case of shutdown of air pollution control equipment for scheduled maintenance, the intent to shut down shall be reported to the Department at least 24 hours prior to the planned shutdown, unless such shutdown is accompanied by the shutdown of the source which such equipment is intended to control. The Department shall be notified when maintenance on the air pollution control equipment is complete and the equipment is operating.</p> <p>(1) Identification of the specific facility to be taken out of service as well as its location and permit number;</p> <p>(2) The expected length of time that the air pollution control equipment will be out of service;</p> <p>(3) The nature and quantity of emissions of air contaminants likely to occur during the shutdown period;</p> <p>(4) Measures such as the use of off-shift labor and equipment that will be taken to minimize the length of the shutdown period;</p> <p>(5) The reasons that it would be impossible or impractical to shut down the source operation during the maintenance period.</p> <p>(b) In the event that there is a breakdown of equipment or upset of process in such a manner as to cause, or is expected to cause, increased emissions of air contaminants which are above an applicable standard, the person responsible for such equipment shall notify the Director within 24 hours or the next working day and provide a statement giving all pertinent facts, including the estimated duration of the breakdown. The Director will be notified when the breakdown has been corrected.</p>	<p>Rule 335-3-1-.07(1),(2)</p>
<p>16. <u>Operation of Capture and Control Devices</u></p> <p>All air pollution control devices and capture systems for which this permit is issued shall be maintained and operated at all times in a manner so as to minimize the emissions of air contaminants. Procedures for ensuring that the above equipment is properly operated and maintained so as to</p>	<p>§22-28-16(d), <u>Code of Alabama 1975</u>, as amended</p>

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<p>minimize the emission of air contaminants shall be established.</p>	
<p>17. <u>Obnoxious Odors</u></p> <p>This permit is issued with the condition that, should obnoxious odors arising from the plant operations be verified by Air Division inspectors, measures to abate the odorous emissions shall be taken upon a determination by the Alabama Department of Environmental Management that these measures are technically and economically feasible.</p>	<p>Rule 335-3-1-.08</p>
<p>18. <u>Fugitive Dust</u></p> <p>(a) Precautions shall be taken to prevent fugitive dust emanating from plant roads, grounds, stockpiles, screens, dryers, hoppers, ductwork, etc.</p> <p>(b) Plant or haul roads and grounds will be maintained in the following manner so that dust will not become airborne:</p> <ol style="list-style-type: none"> (1) By the application of water any time the surface of the road is sufficiently dry to allow the creation of dust emissions by the act of wind or vehicular traffic; (2) By reducing the speed of vehicular traffic to a point below that at which dust emissions are created; (3) By paving; (4) By the application of binders to the road surface at any time the road surface is found to allow the creation of dust emissions; or (5) By any combination of the above methods which results in the prevention of dust becoming airborne from the road surface. 	<p>Rule 335-3-4-.02</p>
<p>19. <u>Additions and Revisions</u></p> <p>Any modifications to this source shall comply with the modification procedures in Rules 335-3-16-.13 or 335-3-16-.14.</p>	<p>Rule 335-3-16-.13 and .14</p>

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<p>20. <u>Recordkeeping Requirements</u></p> <p>(a) Records of required monitoring information of the source shall include the following:</p> <ul style="list-style-type: none"> (1) The date, place, and time of all sampling or measurements; (2) The date analyses were performed; (3) The company or entity that performed the analyses; (4) The analytical techniques or methods used; (5) The results of all analyses; and (6) The operating conditions that existed at the time of sampling or measurement. <p>(b) Retention of records of all required monitoring data and support information of the source for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation and copies of all reports required by the permit.</p>	<p>Rule 335-3-16-.05(c)(2)</p>
<p>21. <u>Reporting Requirements</u></p> <p>(a) Reports to the Department of any required monitoring shall be submitted at least every 6 months. All instances of deviations from permit requirements must be clearly identified in said reports. All required reports must be certified by a responsible official consistent with Rule 335-3-16-.04(9).</p> <p>(b) Deviations from permit requirements shall be reported within 48 hours or 2 working days of such deviations, including those attributable to upset conditions as defined in the permit. The report will include the probable cause of said deviations, and any corrective actions or preventive measures that were taken.</p>	<p>Rule 335-3-16-.05(c)3.</p>
<p>22. <u>Emission Testing Requirements</u></p> <p>(a) Each point of emission which requires testing will be provided with sampling ports, ladders, platforms, and other safety equipment to facilitate testing performed in</p>	<p>Rule 335-3-1-.05(3) Rule 335-3-1-.04(1)</p>

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<p>accordance with procedures established by Part 60 of Title 40 of the Code of Federal Regulations, as the same may be amended or revised.</p> <p>(b) The Air Division must be notified in writing at least 10 days in advance of all emission tests to be conducted and submitted as proof of compliance with the Department's air pollution control rules and regulations.</p> <p>(c) To avoid problems concerning testing methods and procedures, the following shall be included with the notification letter:</p> <ol style="list-style-type: none"> (1) The date the test crew is expected to arrive, the date and time anticipated of the start of the first run, how many and which sources are to be tested, and the names of the persons and/or testing company that will conduct the tests. (2) A complete description of each sampling train to be used, including type of media used in determining gas stream components, type of probe lining, type of filter media, and probe cleaning method and solvent to be used (if test procedures requires probe cleaning). (3) A description of the process(es) to be tested including the feed rate, any operating parameters used to control or influence the operations, and the rated capacity. (4) A sketch or sketches showing sampling point locations and their relative positions to the nearest upstream and downstream gas flow disturbances. <p>(d) A pretest meeting may be held at the request of the source owner or the Air Division. The necessity for such a meeting and the required attendees will be determined on a case-by-case basis.</p> <p>(e) All test reports must be submitted to the Air Division within 30 days of the actual completion of the test unless an extension of time is specifically approved by the Air Division.</p>	

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<p>23. <u>Payment of Emission Fees</u></p>	
<p>Annual emission fees shall be remitted each year according to the fee schedule in ADEM Admin. Code r. 335-1-7-.04.</p>	<p>Rule 335-1-7-.04</p>
<p>24. <u>Other Reporting and Testing Requirements</u></p>	
<p>Submission of other reports regarding monitoring records, fuel analyses, operating rates, and equipment malfunctions may be required as authorized in the Department's air pollution control rules and regulations. The Department may require emission testing at any time.</p>	<p>Rule 335-3-1-.04(1)</p>
<p>25. <u>Title VI Requirements (Refrigerants)</u></p>	
<p>Any facility having appliances or refrigeration equipment, including air conditioning equipment, which use Class I or Class II ozone-depleting substances as listed in 40 CFR part 82, subpart A, appendices A and B, shall service, repair, and maintain such equipment according to the work practices, personnel certification requirements, and certified recycling and recovery equipment specified in 40 CFR part 82, subpart F.</p>	<p>40 CFR Part 82</p>
<p>No person shall knowingly vent or otherwise release any Class I or Class II substance into the environment during the repair, servicing, maintenance, or disposal of any device except as provided in 40 CFR part 82, subpart F.</p>	
<p>The responsible official shall comply with all reporting and recordkeeping requirements of 40 CFR 82.166. Reports shall be submitted to the US EPA and the Department as required.</p>	
<p>26. <u>Chemical Accidental Prevention Provisions</u></p>	
<p>If a chemical listed in Table 1 of 40 CFR 68.130 is present in a process in quantities greater than the threshold quantity listed in Table 1, then:</p>	<p>40 CFR Part 68</p>
<p>(a) The owner or operator shall comply with the provisions in 40 CFR part 68.</p>	
<p>(b) The owner or operator shall submit one of the following:</p>	
<p>(1) A compliance schedule for meeting the requirements of 40 CFR part 68 by the date provided in 40 CFR 68.10(a) or,</p>	
<p>(2) A certification statement that the source is in compliance with all requirements of 40 CFR part</p>	

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68, including the registration and submission of the Risk Management Plan.	
<p>27. <u>Display of Permit</u></p> <p>This permit shall be kept under file or on display at all times at the site where the facility for which the permit is issued is located and will make the permit readily available for inspection by any or all persons who may request to see it.</p>	<p>Rule 335-3-14-.01(1)(d)</p>
<p>28. <u>Circumvention</u></p> <p>No person shall cause or permit the installation or use of any device or any means which, without resulting in the reduction in the total amount of air contaminant emitted, conceals or dilutes any emission of air contaminant which would otherwise violate the Division 3 rules and regulations.</p>	<p>Rule 335-3-1-.10</p>
<p>29. <u>Visible Emissions</u></p> <p>Unless otherwise specified in the Unit Specific provisos of this permit, any source of particulate emissions shall not discharge more than one 6-minute average opacity greater than 20% in any 60-minute period. At no time shall any source discharge a 6-minute average opacity of particulate emissions greater than 40%.</p> <p>Opacity will be determined by 40 CFR part 60, appendix A, Method 9, unless otherwise specified in the Unit Specific provisos of this permit.</p>	<p>Rule 335-3-4-.01(1)</p>
<p>30. <u>Fuel-Burning Equipment</u></p> <p>(a) Unless otherwise specified in the Unit Specific provisos of this permit, no fuel-burning equipment may discharge particulate emissions in excess of the emissions specified in Rule 335-3-4-.03.</p> <p>(b) Unless otherwise specified in the Unit Specific provisos of this permit, no fuel-burning equipment may discharge sulfur dioxide emissions in excess of the emissions specified in Rule 335-3-5-.01.</p>	<p>Rule 335-3-4-.03</p> <p>Rule 335-3-5-.01</p>
<p>31. <u>Process Industries – General</u></p> <p>Unless otherwise specified in the Unit Specific provisos of this permit, no process may discharge particulate emissions in excess of the emissions specified in Rule 335-3-4-.04.</p>	<p>Rule 335-3-4-.04</p>

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<p>32. <u>Averaging Time for Emission Limits</u></p> <p>Unless otherwise specified in the permit, the averaging time for the emission limits listed in this permit shall be the nominal time required by the specific test method.</p> <p>33. <u>Compliance Assurance Monitoring (CAM)</u></p> <p>Conditions (a) through (d) that follow are general conditions applicable to emissions units that are subject to the CAM requirements. Specific requirements related to each emissions unit are contained in the unit specific provisos and the attached CAM appendices.</p> <p>(a) Operation of Approved Monitoring</p> <p>(1) <i>Commencement of operation.</i> The owner or operator shall conduct the monitoring required under this section and detailed in the unit specific provisos and CAM appendix of this permit (if required) upon issuance of the permit, or by such later date specified in the permit pursuant to §64.6(d).</p> <p>(2) <i>Proper maintenance.</i> At all times, the owner or operator shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.</p> <p>(3) <i>Continued operation.</i> Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the owner or operator shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden,</p>	<p>Rule 335-3-1-.05</p> <p>40 CFR 64.7</p>

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<p>infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.</p> <p>(4) <i>Response to excursions or exceedances.</i></p> <p>(i) Upon detecting an excursion or exceedance, the owner or operator shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.</p> <p>(ii) Determination of whether the owner or operator has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.</p> <p>(5) <i>Documentation of need for improved monitoring.</i> After approval of monitoring under this part, if the owner or operator identifies a failure to</p>	

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<p>achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the owner or operator shall promptly notify the Department and, if necessary, submit a proposed modification to the permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.</p>	
<p>(b) Quality Improvement Plan (QIP) Requirements</p> <p>(1) Based on the results of a determination made under Section 33(a)(4)(b) above, the Administrator or the permitting authority may require the owner or operator to develop and implement a QIP. Consistent with 40 CFR 64.6(c)(3), the permit may specify an appropriate threshold, such as an accumulation of exceedances or excursions exceeding 5 percent duration of a pollutant-specific emissions unit's operating time for a reporting period, for requiring the implementation of a QIP. The threshold may be set at a higher or lower percent or may rely on other criteria for purposes of indicating whether a pollutant-specific emissions unit is being maintained and operated in a manner consistent with good air pollution control practices.</p> <p>(2) Elements of a QIP:</p> <p>(i) The owner or operator shall maintain a written QIP, if required, and have it available for inspection.</p> <p>(ii) The plan initially shall include procedures for evaluating the control performance problems and, based on the results of the evaluation procedures, the owner or operator shall modify the plan to include procedures for conducting one or more of the following actions, as appropriate:</p>	<p>40 CFR 64.8</p>

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<ul style="list-style-type: none"> (I) Improved preventive maintenance practices. (II) Process operation changes. (III) Appropriate improvements to control methods. (IV) Other steps appropriate to correct control performance. (V) More frequent or improved monitoring (only in conjunction with one or more steps under paragraphs (2)(b)(i) through (iv) above). <p>(3) If a QIP is required, the owner or operator shall develop and implement a QIP as expeditiously as practicable and shall notify the Department if the period for completing the improvements contained in the QIP exceeds 180 days from the date on which the need to implement the QIP was determined.</p> <p>(4) Following implementation of a QIP, upon any subsequent determination pursuant to Section 33(a)(4)(b) above, the Department may require that an owner or operator make reasonable changes to the QIP if the QIP is found to have:</p> <ul style="list-style-type: none"> (i) Failed to address the cause of the control device performance problems; or (ii) Failed to provide adequate procedures for correcting control device performance problems as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. <p>(5) Implementation of a QIP shall not excuse the owner or operator of a source from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the Act.</p>	

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<p>(c) Reporting and Recordkeeping Requirements</p> <p>(1) General reporting requirements</p> <p>(i) On and after the date specified in Section 33(a)(1) above by which the owner or operator must use monitoring that meets the requirements of this part, the owner or operator shall submit monitoring reports to the permitting authority in accordance with ADEM Admin. Code r. 335-3-16-.05(c)3.</p> <p>(ii) A report for monitoring under this part shall include, at a minimum, the information required under ADEM Admin. Code r. 335-3-16-.05(c)3. and the following information, as applicable:</p> <p>(I) Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;</p> <p>(II) Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and</p> <p>(III) A description of the actions taken to implement a QIP during the reporting period as specified in Section 33(b) above. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.</p>	<p>40 CFR 64.9</p>

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<p>(2) General recordkeeping requirements</p> <p>(i) The owner or operator shall comply with the recordkeeping requirements specified in ADEM Admin. Code r. 335-3-16-.05(c)2.. The owner or operator shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to Section 33(b) above and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under this part (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).</p> <p>(ii) Instead of paper records, the owner or operator may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements.</p> <p>(d) Savings Provisions</p> <p>(1) Nothing in this part shall:</p> <p>(i) Excuse the owner or operator of a source from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the Act. The requirements of this part shall not be used to justify the approval of monitoring less stringent than the monitoring which is required under separate legal authority and are not intended to establish minimum requirements for the purpose of determining the monitoring to be imposed under separate authority under the Act, including monitoring in permits issued</p>	<p>40 CFR 64.10</p>

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<p>pursuant to title I of the Act. The purpose of this part is to require, as part of the issuance of a permit under title V of the Act, improved or new monitoring at those emissions units where monitoring requirements do not exist or are inadequate to meet the requirements of this part.</p> <p>(ii) Restrict or abrogate the authority of the Department to impose additional or more stringent monitoring, recordkeeping, testing, or reporting requirements on any owner or operator of a source under any provision of the Act, including but not limited to sections 114(a)(1) and 504(b), or state law, as applicable.</p> <p>(iii) Restrict or abrogate the authority of the Department to take any enforcement action under the Act for any violation of an applicable requirement or of any person to take action under section 304 of the Act.</p>	

Summary Page for Blast Furnaces 1 & 2 and Agglomeration Furnace (Stack 1)

Permitted

Operating Schedule: 24 Hrs/day x 7 Days/week x 52 Weeks/yr = 8760 Hrs/yr

Emission limitations:

Emission Point #	Description	Pollutant	Emission limit	Regulation
Stack 1*	Blast Furnaces No. 1 w/ Afterburner, Blast Furnace No. 2 w/ Afterburner, and Agglomeration Furnace vented to common Baghouse Stack 1	PM	2.64 lb/hr	Rule 335-3-1-.03 (SIP)
		SO ₂	1,462 lb/hr computed from a rolling 24 hour average	Rule 335-3-14-.04(9) (PSD/BACT)
		CO	650 lb/hr or 325 lb/hr if only one blast furnace operating	Rule 335-3-14-.04 (Anti-PSD)
		CO	1,300°F at the afterburner exit, based on a 3 hour average	Rule 335-3-14-.04 (Anti-PSD)
		Opacity	Less than 20%	40 CFR 60.122(a)(2)
		Pb	0.258 lb/hr AND	Rule 335-3-1-.03 (SIP)
			0.00043 gr/dscf	40 CFR 63.543(a)
		VOC (TGNMO)	34 lb/hr or 17 lb/hr if only one blast furnace operating	Rule 335-3-14-.04 (Anti-PSD)
		VOC (TGNMO)	1,300°F at the afterburner exit, based on a 3 hr average	Rule 335-3-14-.04 (Anti-PSD)
		THC	360 ppmv	40 CFR 63.543(d)
		D/F	170 ng/dscm	40 CFR 63.543(d)

***Permittee shall be in compliance with the requirements for Stack 15 no later than October 1, 2019**

Provisos for Blast Furnaces 1 & 2 and Agglomeration Furnace (Stack 1)

Federally Enforceable Provisos	Regulations
<i>Applicability</i>	
1. This source has enforceable limits in place in order to provide for the attainment of the National Ambient Air Quality Standards.	Rule 335-3-1-.03
2. These sources are subject to the applicable requirements of ADEM Admin. Code r. 335-3-4-.15, <i>"Control of Particulate Emissions from Secondary Lead Smelters."</i>	Rule 335-3-4-.15
3. These sources are subject to the applicable requirements of ADEM Admin. Code r. 335-3-14-.04, <i>"Air Permits Authorizing Construction in Clean Air Areas [Prevention of Significant Deterioration Permitting (PSD)]."</i>	Rule 335-3-14-.04 [PSD/BACT]
4. This source has enforceable limits in place in order to prevent it from being subject to the provisions of ADEM Admin. Code r. 335-3-14-.04.	Rule 335-3-14-.04 [Anti-PSD]
5. These sources are subject to the applicable requirements of ADEM Admin. Code r. 335-3-16-.03, <i>"Major Source Operating Permits."</i>	Rule 335-3-16-.03
6. These sources are subject to the applicable requirements of 40 CFR part 60, subpart L, <i>"Standards of Performance for Secondary Lead Smelters."</i>	40 CFR 60.120(a) Rule 335-3-10-.02 (12)
7. These sources are subject to the applicable requirements of 40 CFR part 60, subpart A, <i>"General Provisions."</i>	40 CFR 60.1(a)
8. These sources are subject to the applicable requirements of 40 CFR part 63, subpart X, <i>"National Emission Standards for Hazardous Air Pollutants from Secondary Lead Smelting."</i>	40 CFR 63.541(a) Rule 335-3-11-.06(23)
9. These sources are subject to the applicable requirements of 40 CFR part 63, subpart X, <i>"General Provisions"</i> as listed in Table 1 of subpart X.	Table 1 of subpart X
10. This source is subject to the applicable requirements of 40 CFR part 64, <i>"Compliance Assurance Monitoring"</i> , to include General Proviso No. 33, for particulate matter, carbon monoxide, and volatile organic compounds.	40 CFR Part 64
<i>Emission Standards</i>	
1. Particulate Matter (PM) emissions from Stack 1 shall not exceed a mass emission rate of 2.64 lb/hr.	Rule 335-3-1-.03
2. Lead emissions from Stack 1 shall not exceed 0.00043 gr/dscf and a mass emission rate of 0.258 lb/hr.	Rule 335-3-1-.03 40 CFR 63.543(a)

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3. Sulfur Dioxide (SO ₂) emissions from Stack 1 shall not exceed a mass emission rate of 1,462 lb/hr, computed from a rolling 24 hour average.	Rule 335-3-14-.04 [PSD/BACT]
4. The opacity of emissions from these sources shall not exceed that designated as 20% opacity.	40 CFR 60.122(a)(2)
5. Volatile Organic Compound (VOC) emissions, as total gaseous non methane organics (TGNMO), from Stack 1 shall not exceed a mass emission rate of 34 lb/hr (17 lb/hr if only one blast furnace is operating).	Rule 335-3-14-.04 [Anti-PSD]
6. Total Hydrocarbon (THC) emissions from Stack 1 shall not exceed 360 ppmv, expressed as propane corrected to 4 % CO ₂ .	40 CFR 63.543(d)
7. Dioxin and Furan (D/F) emissions from Stack 1 shall not exceed 170 nanograms/dscm, expressed as TEQ corrected to 7% O ₂ .	40 CFR 63.543(d)
8. The afterburner exit temperatures for the blast furnaces must be maintained at or above 1,300°F, based on a rolling three hour average.	Rule 335-3-14-.04 [Anti-PSD]
9. Carbon Monoxide (CO) emissions from Stack 1 shall not exceed a mass emission rate of 650 lb/hr (325 lb/hr if only one blast furnace is operating).	Rule 335-3-14-.04 [Anti-PSD]
10. These sources shall be operated in a total enclosure that is maintained at negative pressure at all times and vented to a control device designed to capture lead emissions.	Rule 335-3-1-.03
11. The dust handling systems associated with Baghouse Stack 1 shall be enclosed to prevent fugitive emissions from these handling systems.	Rule 335-3-1-.03
12. If an exceedance of the 2008 Lead National Ambient Air Quality Standard occurs during any three month period, Sanders Lead Company shall, within 180 days, complete and submit a plan to identify which stack or stacks will be raised and to what extent. Sanders Lead Company shall have the plan implemented within 18 months of the exceedance.	Rule 335-3-1-.03
13. No later than October 1, 2019, the Ammonia Injection Scrubber (Stack 15) will be operational, and Sanders Lead Company will be in compliance with all applicable requirements.	Rule 335-3-1-.03
<i>Compliance and Performance Test Methods and Procedures</i>	
1. Method 5 of 40 CFR part 60, appendix A shall be used in the determination of PM emissions.	Rule 335-3-1-.05

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2. Method 6C of 40 CFR part 60, appendix A shall be used in the determination of SO ₂ emissions.	Rule 335-3-1-.05
3. Method 9 of 40 CFR part 60, appendix A shall be used in the determination of opacity of the stack emissions.	Rule 335-3-1-.05
4. Method 9 of 40 CFR part 60, appendix A, excluding Section 2.5, shall be used in the determination of opacity from emissions escaping the capture system from the charge doors, slag taps, and lead taps.	Rule 335-3-4-.15(6)
5. Method 10 of 40 CFR part 60, appendix A shall be used in the determination of CO emissions.	Rule 335-3-1-.05
6. Method 25 of 40 CFR part 60, appendix A shall be used in the determination of VOC (TGNMO) emissions.	Rule 335-3-1-.05
7. Method 12 or 29 of 40 CFR part 60, appendix A shall be used in the determination of lead compound emissions.	40 CFR 63.547(a)(5)
8. Method 25A of 40 CFR part 60, appendix A shall be used in the determination of THC emissions.	40 CFR 63.547(b)(4)
9. For purposes of determining compliance with the THC limit, the procedures in §63.547(c) shall be used.	40 CFR 63.547(c)
10. Method 23 of 40 CFR part 60, appendix A shall be used in the determination of D/F emissions.	40 CFR 63.547(d)(5)
11. For purposes of determining compliance with the D/F limit, the procedures in §63.547(e) shall be used.	40 CFR 63.547(e)
<i>Emission Monitoring</i>	
1. This source is subject to the applicable monitoring requirements in §63.548 of 40 CFR part 63, subpart X.	40 CFR 63.548
2. Compliance tests for lead emissions from Stack 1 shall be conducted according to the schedule specified in §63.543(g) of 40 CFR part 63, subpart X.	40 CFR 63.543(g)
3. Compliance tests for THC emissions from Stack 1 shall be conducted according to the schedule specified in §63.543(h) of 40 CFR part 63, subpart X.	40 CFR 63.543(h)
4. Compliance tests for D/F emissions from Stack 1 shall be conducted at least once every 6 years.	40 CFR 63.543(i)
5. Reference the Appendix for the monitoring requirements for 40 CFR part 64, "Compliance Assurance Monitoring."	40 CFR Part 64
6. The installed Continuous Opacity Monitoring System (COMS) for Stack 1 will be operated and maintained according to the	Rule 335-3-14-.04

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procedures in Performance Specification 1 of 40 CFR part 60, appendix B. COMS data will be used to demonstrate compliance with the opacity standard.	
7. The installed Continuous Emissions Monitor System (CEMS) for Stack 1 will be operated and maintained according to the procedures in Performance Specification 2 of 40 CFR part 60, appendix B. CEMS data will be used to demonstrate compliance with the SO ₂ standard.	Rule 335-3-14-.04
8. The temperature of the gas stream at the exit of each afterburner shall be continuously monitored by a device operated in accordance with the provisions in §63.8 and §63.548(j).	40 CFR 63.548(j)(1)-(4)
9. A standard operating procedures (SOP) manual shall be prepared and adhered to as required by §63.548(a). The SOP manual must, at a minimum, include the requirements of §63.548(c) and (d).	40 CFR 63.548(a)-(d)
10. Ambient air monitoring for sulfur dioxide must be conducted for the plant for which this permit is issued once the wet scrubber system is installed and operational. The type, number, and location of these instruments must be approved by the Director. Collected data is to be submitted to this agency in a format and at a frequency specified by the Director.	Rule 335-3-14-.04
11. The facility must install, operate and maintain a digital differential pressure monitoring system to continuously monitor each total enclosure.	Rule 335-3-1-.03
<i>Recordkeeping and Reporting Requirements</i>	
1. All upsets, accidents, or other events that create or cause higher than expected lead-bearing emissions that may impact ambient air quality will be reported to the Department by telephone no later than the next normal work day after the event. A monthly summary report of these events will be mailed to the Department no later than the fifth day of the following month. Negative reports will be submitted.	Rule 335-3-14-.04
2. An Excess Emissions report for Stack 1 shall be submitted to the Department quarterly. The report will include the following information:	Rule 335-3-14-.04
(a) <i>Opacity:</i> The magnitude of excess emissions of 20% as computed from 6-minute averages.	
SO ₂ : Emission rates over 1,462 lb/hr as computed from a rolling 24-hour average.	

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Afterburner Exit Temperature: Each value below 1,300°F as computed from a rolling 3-hour average.

Note: Data recorded during periods of monitor system breakdowns, maintenance, adjustments, and calibration checks shall not be included in any of the above data averages.

- (b) The date and time of commencement and completion of each time period of excess emissions.
- (c) The nature and cause of the excess emissions (if known) and the corrective action taken or preventative measures adopted.
- (d) The date and time identified each period during which either of the monitoring system were inoperative (excepting zero and span checks) and the nature of the repairs or adjustments.
- (e) Equations used to convert SO₂ emission data as monitored to the required reporting standard (lb/hr).
- (f) When no excess emissions have occurred and the monitoring system(s) was not inoperative or did not require repair or adjustment, such information will be stated in the report.
- (g) The report will be submitted according to the following schedule:

<u>Reporting Period</u>	<u>Submittal Date</u>
<i>January 1st through March 31st</i>	<i>April 30th</i>
<i>April 1st through June 30th</i>	<i>July 30th</i>
<i>July 1st through September 30th</i>	<i>October 30th</i>
<i>October 1st through December 31st</i>	<i>January 30th</i>

3. Should the emissions from Stack 1 exceed a six-minute average opacity of 20%, as determined by the COMS, the Department will be notified immediately. A decision will then be made on whether operations can continue or must be suspended until corrective measures are taken.

Rule 335-3-14-.04

4. All of the original data charts, performance evaluations, calibrations checks, adjustments, and maintenance records and other information regarding and generated by the afterburner temperature, opacity, SO₂, and ambient air monitoring systems will be maintained in a permanent form suitable for inspection. The file shall be retained for at least five (5) years following the date of such measurements, maintenance, reports, and records.

Rule 335-3-14-.04

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5. The facility shall keep a record of when each furnace is operating, noting when both furnaces are operating simultaneously.	Rule 335-3-14-.04
6. The facility shall comply with the recordkeeping and reporting requirements in §63.10.	40 CFR 63.550(a)
7. The facility shall comply with the recordkeeping and reporting requirements in §63.550.	40 CFR 63.550

Summary Page for Blast Furnaces 3 & 4 (Stack 5)

Permitted

Operating Schedule: 24 Hrs/day x 7 Days/week x 52 Weeks/yr = 8760 Hrs/yr

Emission limitations:

Emission Point #	Description	Pollutant	Emission limit	Regulation
Stack 5*	Blast Furnace No. 3 w/ Afterburner, Blast Furnace No. 4 w/ Afterburner vented to common Baghouse Stack 5	PM	2.64 lb/hr	Rule 335-3-1-.03 (SIP)
		SO ₂	1,253 lb/hr computed from a rolling 24 hour average	Rule 335-3-14-.04(9) (PSD/BACT)
		CO	650 lb/hr or 325 lb/hr if only one blast furnace operating	Rule 335-3-14-.04 (Anti-PSD)
		CO	1,300°F at the afterburner exit, based on a 3 hour average	Rule 335-3-14-.04 (Anti-PSD)
		Opacity	Less than 10%	Rule 335-3-14-.04(9) (PSD/BACT)
		Pb	0.258 lb/hr AND 0.00043 gr/dscf	Rule 335-3-1-.03 (SIP) 40 CFR 63.543(a)
		VOC (TGNMO)	32 lb/hr or 16 lb/hr if only one blast furnace operating	Rule 335-3-14-.04 (Anti-PSD)
		VOC (TGNMO)	1,300°F at the afterburner exit, based on a 3 hour average	Rule 335-3-14-.04 (Anti-PSD)
		THC	360 ppmv	40 CFR 63.543(d)
		D/F	170 ng/dscm	40 CFR 63.543(d)

***Permittee shall be in compliance with the requirements for Stack 15 no later than October 1, 2019**

Provisos for Blast Furnaces 3 & 4 (Stack 5)

Federally Enforceable Provisos	Regulations
<p><i>Applicability</i></p> <ol style="list-style-type: none"> 1. This source has enforceable limits in place in order to provide for the attainment of the National Ambient Air Quality Standards. 2. These sources are subject to the applicable requirements of ADEM Admin. Code r. 335-3-4-.15, "<i>Control of Particulate Emissions from Secondary Lead Smelters.</i>" 3. These sources are subject to the applicable requirements of ADEM Admin. Code r. 335-3-14-.04, "<i>Air Permits Authorizing Construction in Clean Air Areas [Prevention of Significant Deterioration Permitting (PSD)].</i>" 4. This source has enforceable limits in place in order to prevent it from being subject to the provisions of ADEM Admin. Code r. 335-3-14-.04. 5. These sources are subject to the applicable requirements of ADEM Admin. Code r. 335-3-16-.03, "<i>Major Source Operating Permits.</i>" 6. These sources are subject to the applicable requirements of 40 CFR part 60, subpart L, "<i>Standards of Performance for Secondary Lead Smelters.</i>" 7. These sources are subject to the applicable requirements of 40 CFR part 60, subpart A, "<i>General Provisions.</i>" 8. These sources are subject to the applicable requirements of 40 CFR part 63, subpart X, "<i>National Emission Standards for Hazardous Air Pollutants from Secondary Lead Smelting.</i>" 9. These sources are subject to the applicable requirements of 40 CFR part 63, subpart X, "<i>General Provisions</i>" as listed in Table 1 of subpart X. 10. This source is subject to the applicable requirements of 40 CFR part 64, "<i>Compliance Assurance Monitoring</i>", to include General Proviso No. 33, for particulate matter, carbon monoxide, and volatile organic compounds. 	<p>Rule 335-3-1-.03</p> <p>Rule 335-3-4-.15</p> <p>Rule 335-3-14-.04 [PSD/BACT]</p> <p>Rule 335-3-14-.04 [Anti-PSD]</p> <p>Rule 335-3-16-.03</p> <p>40 CFR 60.120(a) Rule 335-3-10-.02 (12)</p> <p>40 CFR 60.1(a)</p> <p>40 CFR 63.541(a) Rule 335-3-11-.06(23)</p> <p>Table 1 of subpart X</p> <p>40 CFR Part 64</p>
<p><i>Emission Standards</i></p> <ol style="list-style-type: none"> 1. Particulate Matter (PM) emissions from Stack 5 shall not a mass emission rate of 2.64 lb/hr. 2. Lead emissions from Stack 5 shall not exceed 0.00043 gr/dscf and a mass emission rate of 0.258 lb/hr. 	<p>Rule 335-3-1-.03</p> <p>Rule 335-3-1-.03 40 CFR 63.543(a)</p>

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3. Sulfur Dioxide (SO ₂) emissions from Stack 5 shall not exceed a mass emission rate of 1,253 lb/hr, computed from a rolling 24 hour average.	Rule 335-3-14-.04 [PSD/BACT]
4. The opacity of emissions from these sources shall not exceed that designated as 10% opacity.	Rule 335-3-14-.04 [PSD/BACT]
5. Volatile Organic Compound (VOC) emissions, as total gaseous non methane organics (TGNMO), from Stack 5 shall not exceed a mass emission rate of 32 lb/hr (16 lb/hr if only one blast furnace is operating).	Rule 335-3-14-.04 [Anti-PSD]
6. Total Hydrocarbon (THC) emissions from Stack 5 shall not exceed 360 ppmv, expressed as propane corrected to 4 % CO ₂ .	40 CFR 63.543(d)
7. Dioxin and Furan (D/F) emissions from Stack 5 shall not exceed 170 nanograms/dscm, expressed as TEQ corrected to 7% O ₂ .	40 CFR 63.543(d)
8. The afterburner exit temperatures for the blast furnaces must be maintained at or above 1300°F, based on a rolling three hour average.	Rule 335-3-14-.04 [Anti-PSD]
9. Carbon Monoxide (CO) emissions from Stack 5 shall not exceed a mass emission rate of 650 lb/hr (325 lb/hr if only one blast furnace is operating).	Rule 335-3-14-.04 [Anti-PSD]
10. These sources shall be operated in a total enclosure that is maintained at negative pressure at all times and vented to a control device designed to capture lead emissions.	Rule 335-3-1-.03
11. The dust handling systems associated with Baghouse Stack 5 shall be enclosed to prevent fugitive emissions from these handling systems.	Rule 335-3-1-.03
12. If an exceedance of the 2008 Lead National Ambient Air Quality Standard occurs during any three month period, Sanders Lead Company shall, within 180 days, complete and submit a plan to identify which stack or stacks will be raised and to what extent. Sanders Lead Company shall have the plan implemented within 18 months of the exceedance.	Rule 335-3-1-.03
13. No later than October 1, 2019, the Ammonia Injection Scrubber (Stack 15) will be operational, and Sanders Lead Company will be in compliance with all applicable requirements.	Rule 335-3-1-.03
<i>Compliance and Performance Test Methods and Procedures</i>	
1. Method 5 of 40 CFR part 60, appendix A shall be used in the determination of PM emissions.	Rule 335-3-1-.05

Federally Enforceable Provisos	Regulations
2. Method 6C of 40 CFR part 60, appendix A shall be used in the determination of SO ₂ emissions.	Rule 335-3-1-.05
3. Method 9 of 40 CFR part 60, appendix A shall be used in the determination of opacity of the stack emissions.	Rule 335-3-1-.05
4. Method 9 of 40 CFR part 60, appendix A, excluding Section 2.5, shall be used in the determination of opacity from emissions escaping the capture system from the charge doors, slag taps, and lead taps.	Rule 335-3-4-.15(6)
5. Method 10 of 40 CFR part 60, appendix A shall be used in the determination of CO emissions.	Rule 335-3-1-.05
6. Method 25 of 40 CFR part 60, appendix A shall be used in the determination of VOC (TGNMO) emissions.	Rule 335-3-1-.05
7. Method 12 or 29 of 40 CFR part 60, appendix A shall be used in the determination of lead compound emissions.	40 CFR 63.547(a)(5)
8. Method 25A of 40 CFR part 60, appendix A shall be used in the determination of THC emissions from the stack.	40 CFR 63.547(b)(4)
9. For purposes of determining compliance with the THC limit, the procedures in §63.547(c) shall be used.	40 CFR 63.547(c)
10. Method 23 of 40 CFR part 60, appendix A shall be used in the determination of D/F emissions from the stack.	40 CFR 63.547(d)(5)
11. For purposes of determining compliance with the THC limit, the procedures in §63.547(e) shall be used.	40 CFR 63.547(e)
<i>Emission Monitoring</i>	
1. This source is subject to the applicable monitoring requirements in §63.548 of 40 CFR part 63, subpart X.	40 CFR 63.548
2. Compliance tests for lead emissions from Stack 5 shall be conducted according to the schedule specified in §63.543(g) of 40 CFR part 63, subpart X.	40 CFR 63.543(g)
3. Compliance tests for THC emissions from Stack 5 shall be conducted according to the schedule specified in §63.543(h) of 40 CFR part 63, subpart X.	40 CFR 63.543(h)
4. Compliance tests for D/F emissions from Stack 5 shall be conducted at least once every 6 years.	40 CFR 63.543(i)
5. Reference the Appendix for the monitoring requirements for 40 CFR part 64, "Compliance Assurance Monitoring."	40 CFR Part 64
6. The installed Continuous Opacity Monitoring System (COMS) for Stack 5 will be operated and maintained according to the	Rule 335-3-14-.04

Federally Enforceable Provisos	Regulations
procedures in Performance Specification 1 of 40 CFR part 60, appendix B. COMS data will be used to demonstrate compliance with the opacity standard.	
7. The installed Continuous Emissions Monitor System (CEMS) for Stack 5 will be operated and maintained according to the procedures in Performance Specification 2 of 40 CFR part 60, appendix B. CEMS data will be used to demonstrate compliance with the SO ₂ standard.	Rule 335-3-14-.04
8. The temperature of the gas stream at the exit of each afterburner shall be continuously monitored by a device operated in accordance with the provisions in §63.8 and §63.548(j).	40 CFR 63.548(j)(1)-(4)
9. A standard operating procedures (SOP) manual shall be prepared and adhered to as required by §63.548(a). The SOP manual must, at a minimum, include the requirements of §63.548(c) and (d).	40 CFR 63.548(a)-(d)
10. Ambient air monitoring for sulfur dioxide must be conducted for the plant for which this permit is issued once the wet scrubber system is installed and operational. The type, number, and location of these instruments must be approved by the Director. Collected data is to be submitted to this agency in a format and at a frequency specified by the Director.	Rule 335-3-14-.04
11. The facility must install, operate and maintain a digital differential pressure monitoring system to continuously monitor each total enclosure.	Rule 335-3-1-.03
<i>Recordkeeping and Reporting Requirements</i>	
1. All upsets, accidents, or other events that create or cause higher than expected lead-bearing emissions that may impact ambient air quality will be reported to the Department by telephone no later than the next normal work day after the event. A monthly summary report of these events will be mailed to the Department no later than the fifth day of the following month. Negative reports will be submitted.	Rule 335-3-14-.04
2. An Excess Emissions report for Stack 1 shall be submitted to the Department quarterly. The report will include the following information:	Rule 335-3-14-.04
(a) <i>Opacity:</i> The magnitude of excess emissions of 10% as computed from 6-minute averages.	
SO ₂ : Emission rates over 1,253 lb/hr as computed from a rolling 24-hour average.	

Federally Enforceable Provisos**Regulations**

Afterburner Exit Temperature: Each value below 1,300°F as computed from a rolling 3-hour average.

Note: Data recorded during periods of monitor system breakdowns, maintenance, adjustments, and calibration checks shall not be included in any of the above data averages.

- (b) The date and time of commencement and completion of each time period of excess emissions.
- (c) The nature and cause of the excess emissions (if known) and the corrective action taken or preventative measures adopted.
- (d) The date and time identified each period during which either of the monitoring system were inoperative (excepting zero and span checks) and the nature of the repairs or adjustments.
- (e) Equations used to convert SO₂ emission data as monitored to the required reporting standard (lb/hr).
- (f) When no excess emissions have occurred and the monitoring system(s) was not inoperative or did not require repair or adjustment, such information will be stated in the report.
- (g) The report will be submitted according to the following schedule:

<u>Reporting Period</u>	<u>Submittal Date</u>
<i>January 1st through March 31st</i>	<i>April 30th</i>
<i>April 1st through June 30th</i>	<i>July 30th</i>
<i>July 1st through September 30th</i>	<i>October 30th</i>
<i>October 1st through December 31st</i>	<i>January 30th</i>

- 3. Should the emissions from Stack 5 exceed a six-minute average opacity of 10%, as determined by the COMS, the Department will be notified immediately. A decision will then be made on whether operations can continue or must be suspended until corrective measures are taken. Rule 335-3-14-.04
- 4. All of the original data charts, performance evaluations, calibrations checks, adjustments, and maintenance records and other information regarding and generated by the afterburner temperature, opacity, SO₂, and ambient air monitoring systems will be maintained in a permanent form suitable for inspection. The file shall be retained for at least five (5) years following the date of such measurements, maintenance, reports, and records. Rule 335-3-14-.04

Federally Enforceable Provisos	Regulations
5. The facility shall keep a record of when each furnace is operating, noting when both furnaces are operating simultaneously.	Rule 335-3-14-.04
6. The facility shall comply with the recordkeeping and reporting requirements in §63.10.	40 CFR 63.550(a)
7. The facility shall comply with the recordkeeping and reporting requirements in §63.550.	40 CFR 63.550

Summary Page for Blast Furnaces 1, 2, 3, & 4 Sanitary Hoods (Stacks 4 & 4a)

Permitted

Operating Schedule: 24 Hrs/day x 7 Days/week x 52 Weeks/yr = 8760 Hrs/yr

Emission limitations:

Emission Point #	Description	Pollutant	Emission limit	Regulation
Stack 4	Sanitary Baghouse Stack 4 including: <ul style="list-style-type: none"> Furnace No. 1 Sanitary Hoods Furnace No. 2 Sanitary Hoods 	PM*	0.0039 gr/dscf (1.62 lb/hr)	Rule 335-3-14-.04(9) (PSD/BACT)
		Pb	0.022 lb/hr AND	Rule 335-3-1-.03 (SIP)
			0.00043 gr/dscf	40 CFR 63.543(a)
		THC	20 ppmv	40 CFR 63.543(f)
		Opacity	(see general provisos)	Rule 335-3-4-.01(1)
Stack 4a	Sanitary Baghouse Stack 4a including: <ul style="list-style-type: none"> Furnace No. 3 Sanitary Hoods Furnace No. 4 Sanitary Hoods Three (3) Flue Dust Storage Bins 	PM*	0.0039 gr/dscf (1.62 lbs/hr)	Rule 335-3-14-.04(9) (PSD/BACT)
		Pb	0.022 lb/hr AND	Rule 335-3-1-.03 (SIP)
			0.00043 gr/dscf	40 CFR 63.543(a)
		THC	20 ppmv	40 CFR 63.543(f)
		Opacity	(see general provisos)	Rule 335-3-4-.01(1)

***Combined PM Emission Limit from Stack 4 and Stack 4a**

Provisos for Blast Furnaces 1, 2, 3, & 4 Sanitary Hoods (Stacks 4 & 4a)

Federally Enforceable Provisos	Regulations
<i>Applicability</i>	
1. This source has enforceable limits in place in order to provide for the attainment of the National Ambient Air Quality Standards.	Rule 335-3-1-.03
2. These sources are subject to the applicable requirements of ADEM Admin. Code r. 335-3-4-.15, " <i>Control of Particulate Emissions from Secondary Lead Smelters.</i> "	Rule 335-3-4-.15
3. These sources are subject to the applicable requirements of ADEM Admin. Code r. 335-3-14-.04, " <i>Air Permits Authorizing Construction in Clean Air Areas [Prevention of Significant Deterioration Permitting (PSD)].</i> "	Rule 335-3-14-.04 [PSD/BACT]
4. These sources are subject to the applicable requirements of ADEM Admin. Code r. 335-3-16-.03, " <i>Major Source Operating Permits.</i> "	Rule 335-3-16-.03
5. These sources are subject to the applicable requirements of 40 CFR part 63, subpart X, " <i>National Emission Standards for Hazardous Air Pollutants from Secondary Lead Smelting.</i> "	40 CFR 63.541(a) Rule 335-3-11-.06(23)
6. These sources are subject to the applicable requirements of 40 CFR part 63, subpart X, " <i>General Provisions</i> " as listed in Table 1 of subpart X.	Table 1 of subpart X
7. These sources are subject to the applicable requirements of 40 CFR part 64, " <i>Compliance Assurance Monitoring</i> ", to include General Proviso No. 33, for particulate matter.	40 CFR Part 64
<i>Emission Standards</i>	
1. The combined particulate matter (PM) emissions from Stack 4 and Stack 4a shall not exceed 0.0039 gr/dscf and a mass emission rate of 1.62 lbs/hr.	Rule 335-3-14-.04 [PSD/BACT]
2. Lead emissions from Stack 4 shall not exceed 0.00043 gr/dscf and a mass emission rate of 0.022 lb/hr.	Rule 335-3-1-.03 40 CFR 63.543(a)
3. Lead emissions from Stack 4a shall not exceed 0.00043 gr/dscf and a mass emission rate of 0.022 lb/hr.	Rule 335-3-1-.03 40 CFR 63.543(a)
4. Total Hydrocarbon (THC) emissions from the blast furnace charging process shall not exceed 20 ppmv.	40 CFR 63.543(f)
5. Visible emissions escaping the capture system (Blast Furnace Canopy Hoods and Sanitary Hoods) for the charging door shall not exceed 10% opacity when charging the blast furnace.	Rule 335-3-4-.15 (6)(a)

Federally Enforceable Provisos	Regulations
6. Visible emissions escaping the capture system (Blast Furnace Canopy Hoods and Sanitary Hoods) for the closed charging door on the blast furnace shall not exceed 5% opacity during furnace operation.	Rule 335-3-4-.15 (6)(a)
7. Visible emissions escaping the capture system (Blast Furnace Canopy Hoods and Sanitary Hoods) for the slag tap and lead tap on the blast furnace shall not exceed 1% opacity.	Rule 335-3-4-.15 (6)(b)
8. These sources shall be operated in a total enclosure that is maintained at negative pressure at all times and vented to a control device designed to capture lead emissions.	Rule 335-3-1-.03
9. If an exceedance of the 2008 Lead National Ambient Air Quality Standard occurs during any three month period, Sanders Lead Company shall, within 180 days, complete and submit a plan to identify which stack or stacks will be raised and to what extent. Sanders Lead Company shall have the plan implemented within 18 months of the exceedance.	Rule 335-3-1-.03
<i>Compliance and Performance Test Methods and Procedures</i>	
1. Method 5 of 40 CFR part 60, appendix A shall be used in the determination of PM emissions.	Rule 335-3-1-.05
2. Method 9 of 40 CFR part 60, appendix A shall be used in the determination of opacity of the stack emissions.	Rule 335-3-1-.05
3. Method 12 or 29 of 40 CFR part 60, appendix A shall be used in the determination of lead compound emissions.	40 CFR 63.547(a)(5)
4. Method 25A of 40 CFR part 60, appendix A shall be used in the determination of THC emissions.	40 CFR 63.547(b)(4)
5. For purposes of determining compliance with the THC limit, the procedures §63.547(c) shall be used.	40 CFR 63.547(c)
<i>Emission Monitoring</i>	
1. This source is subject to the applicable monitoring requirements in §63.548 of 40 CFR part 63, subpart X.	40 CFR 63.548
2. Compliance tests for lead emissions from Stack 5 shall be conducted according to the schedule specified in §63.543(g) of 40 CFR part 63, subpart X.	40 CFR 63.543(g)
3. Compliance tests for THC emissions from Stack 5 shall be conducted according to the schedule specified in §63.543(h) of 40 CFR part 63, subpart X.	40 CFR 63.543(h)
4. Reference the Appendix for the monitoring requirements for 40 CFR Part 64, "Compliance Assurance Monitoring."	40 CFR Part 64

Federally Enforceable Provisos	Regulations
5. A standard operating procedures (SOP) manual shall be prepared and adhered to as required by §63.548(a). The SOP manual must, at a minimum, include the requirements of §63.548(c) and (d).	40 CFR 63.548(a)-(d)
6. If the Baghouses (Stack 4 and Stack 4a) are equipped with HEPA filters in accordance with 40 CFR part 63, subpart X, the facility shall monitor and record the pressure drop across the HEPA filter system daily. If the pressure drop is outside the limit specified by the filter manufacturer, maintenance inspections and/or corrective action are to be initiated.	40 CFR 63.548(g)
7. A bag leak detection system shall be operated in accordance with 40 CFR part 63, subpart X unless the Baghouses (Stack 4 and Stack 4a) are equipped with HEPA filters.	40 CFR 63.548(c)(9)
8. The facility must install, operate and maintain a digital differential pressure monitoring system to continuously monitor each total enclosure.	Rule 335-3-1-.03
<i>Recordkeeping and Reporting Requirements</i>	
1. The facility shall comply with the recordkeeping and reporting requirements in §63.10.	40 CFR 63.550(a)
2. The facility shall comply with the recordkeeping and reporting requirements in §63.10.	40 CFR 63.550
3. The Permittee shall maintain a record of all monitoring required by this permit. This shall include all problems observed and any corrective action taken. The records shall be maintained in a form suitable for inspection and shall be kept on site for a period of five (5) years.	Rule 335-3-16-.05

Summary Page for Soda Ash Storage Silo

Permitted

Operating Schedule: 24 Hrs/day x 7 Days/week x 52 Weeks/yr = 8760 Hrs/yr

Emission limitations:

Emission Point #	Description	Pollutant	Emission limit	Regulation
EP 018	Soda Ash Storage Silo with Bagfilter	PM	3.59 (P) ^{0.62}	Rule 334-3-4-.04
		Opacity	(see general provisos)	Rule 334-3-4-.01(1)

Provisos for Soda Ash Storage Silo

Federally Enforceable Provisos	Regulations
<i>Applicability</i>	
1. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-16-.03, "Major Source Operating Permits."	Rule 335-3-16-.03
<i>Emission Standards</i>	
1. This source is subject to no additional specific requirements other than those listed in the General Permit Provisos.	N/A
<i>Compliance and Performance Test Methods and Procedures</i>	
1. Method 5 of 40 CFR part 60, appendix A shall be used in the determination of particulate matter emissions.	Rule 335-3-1-.05
2. Method 9 of 40 CFR part 60, appendix A shall be used in the determination of opacity of the stack emissions.	Rule 335-3-1-.05
<i>Emission Monitoring</i>	
1. This source is subject to no additional specific requirements other than those listed in the General Permit Provisos.	N/A
<i>Recordkeeping and Reporting Requirements</i>	
1. This source is subject to no additional specific requirements other than those listed in the General Permit Provisos.	N/A

Summary Page for Alloying Kettles and Alloying Kettles Heating System

Permitted

Operating Schedule: 24 Hrs/day x 7 Days/week x 52 Weeks/yr = 8760 Hrs/yr

Emission limitations:

Emission Point #	Description	Pollutant	Emission limit	Regulation
Stack 5*	Eight Alloying Kettles vented to Baghouse Stack 5	PM	2.64 lb/hr	Rule 335-3-1-.03 (SIP)
		Pb	0.258 lb/hr AND	Rule 335-3-1-.03 (SIP)
			0.00043 gr/dscf	40 CFR 63.543(a)
		Opacity	Less than 10%	Rule 335-3-14-.04(9) (PSD/BACT)
Stack 4	Alloying Kettle Heating System vented to Baghouse Stack 4	PM**	0.0039 gr/dscf (1.62 lbs/hr)	Rule 335-3-14-.04(9) (PSD/BACT)
		Pb	0.022 lb/hr AND	Rule 335-3-1-.03 (SIP)
			0.00043 gr/dscf	40 CFR 63.543(a)
		Opacity	(see general provisos)	Rule 335-3-4-.01(1)
Stack 14	Alloying Kettles & Heating System vented to Baghouse Stack 14	PM	1.78 lb/hr	Rule 335-3-1-.03 (SIP)
		Pb	0.038 lb/hr AND	Rule 335-3-1-.03 (SIP)
			0.00043 gr/dscf	40 CFR 63.543(a)
		Pb***	0.027 lb/hr	Rule 335-3-1-.03 (SIP)
		Opacity	(see general provisos)	Rule 335-3-4-.01(1)

*Permittee shall be in compliance with the requirements for Stack 15 no later than October 1, 2019

**Combined PM Emission Limit from Stack 4 and Stack 4a

***Permittee shall be in compliance with the emission limit no later than October 1, 2019

Provisos for Alloying Kettles and Alloying Kettles Heating System

Federally Enforceable Provisos	Regulations
<i>Applicability</i>	
1. This source has enforceable limits in place in order to provide for the attainment of the National Ambient Air Quality Standards.	Rule 335-3-1-.03
2. These sources are subject to the applicable requirements of ADEM Admin. Code r. 335-3-4-.15, <i>"Control of Particulate Emissions from Secondary Lead Smelters."</i>	Rule 335-3-4-.15
3. These sources are subject to the applicable requirements of ADEM Admin. Code r. 335-3-14-.04, <i>"Air Permits Authorizing Construction in Clean Air Areas [Prevention of Significant Deterioration Permitting (PSD)]."</i>	Rule 335-3-14-.04 [PSD/BACT]
4. These sources are subject to the applicable requirements of ADEM Admin. Code r. 335-3-16-.03, <i>"Major Source Operating Permits."</i>	Rule 335-3-16-.03
5. These sources are subject to the applicable requirements of 40 CFR part 63, subpart X, <i>"National Emission Standards for Hazardous Air Pollutants from Secondary Lead Smelting."</i>	40 CFR 63.541(a) Rule 335-3-11-.06 (23)
6. These sources are subject to the applicable requirements of 40 CFR part 63, subpart X, <i>"General Provisions"</i> as listed in Table 1 of subpart X.	Table 1 of subpart X
7. This source is subject to the applicable requirements of 40 CFR part 64, <i>"Compliance Assurance Monitoring"</i> , to include General Proviso No. 33, for particulate matter.	40 CFR Part 64
<i>Emission Standards</i>	
1. The facility shall not alloy in more than four (4) alloying kettles at any one time.	Rule 335-3-14-.04 [PSD/BACT]
2. Particulate Matter (PM) emissions from Stack 5 shall not exceed a mass emission rate of 2.64 lb/hr.	Rule 335-3-1-.03
3. Lead emissions from Stack 5 shall not exceed 0.00043 gr/dscf and a mass emission rate of 0.258 lb/hr.	Rule 335-3-1-.03 40 CFR 63.543(a)
4. The opacity of emissions from Stack 5 shall not exceed that designated as 10%.	Rule 335-3-14-.04 [PSD/BACT]
5. The combined PM emissions from Stack 4 and Stack 4a shall not exceed 0.0039 gr/dscf and a mass emission rate of 1.62 lb/hr.	Rule 335-3-14-.04 [PSD/BACT]

Federally Enforceable Provisos	Regulations
6. Lead emissions from Stack 4 shall not exceed 0.00043 gr/dscf and a mass emission rate of 0.022 lb/hr.	Rule 335-3-1-.03 40 CFR 63.543(a)
7. PM emissions from Stack 14 shall not exceed a mass emission rate of 1.78 lb/hr.	Rule 335-3-1-.03
8. Lead emissions from Stack 14 shall not exceed 0.00043 gr/dscf and a mass emission rate of 0.038 lb/hr.	Rule 335-3-1-.03 40 CFR 63.543(a)
9. No later than October 1, 2019, the lead emissions from Stack 14 shall not exceed a mass emission rate of 0.027 lb/hr.	Rule 335-3-1-.03
10. This source shall be equipped with a secondary HEPA filter system downstream of the Baghouse associated with Stack 14.	Rule 335-3-1-.03
11. These sources shall be operated in a total enclosure that is maintained at negative pressure at all times and vented to a control device designed to capture lead emissions.	Rule 335-3-1-.03
12. The facility shall conduct all maintenance activities associated with contaminated equipment within enclosed areas. Sanders Lead Company shall install transfer points at the refining, smelting, and raw material storage building exits to contain leaded vehicles within the buildings. Contaminated equipment leaving the enclosure shall be decontaminated prior to exiting the enclosure.	Rule 335-3-1-.03
13. If an exceedance of the 2008 Lead National Ambient Air Quality Standard occurs during any three month period, Sanders Lead Company shall, within 180 days, complete and submit a plan to identify which stack or stacks will be raised and to what extent. Sanders Lead Company shall have the plan implemented within 18 months of the exceedance.	Rule 335-3-1-.03
14. No later than October 1, 2019, the Ammonia Injection Scrubber (Stack 15) will be operational, and Sanders Lead Company will be in compliance with all applicable requirements.	Rule 335-3-1-.03
<i>Compliance and Performance Test Methods and Procedures</i>	
1. Method 5 of 40 CFR part 60, appendix A shall be used in the determination of PM emissions.	Rule 335-3-1-.05
2. Method 9 of 40 CFR part 60, appendix A shall be used in the determination of opacity of the stack emissions.	Rule 335-3-1-.05
3. Method 12 or 29 of 40 CFR part 60, appendix A shall be used in the determination of lead compound emissions.	40 CFR 63.547(a)(5)

Federally Enforceable Provisos	Regulations
<i>Emission Monitoring</i>	
1. This source is subject to the applicable monitoring requirements in §63.548 of 40 CFR part 63, subpart X.	40 CFR 63.548
2. The facility shall conduct lead compliance tests on the Stacks associated with these sources according to the schedule specified in §63.543(g) of 40 CFR part 63, subpart X.	40 CFR 63.543(g)
3. Reference the Appendix for the monitoring requirements for 40 CFR part 64, “Compliance Assurance Monitoring.”	40 CFR Part 64
4. A standard operating procedures (SOP) manual shall be prepared and adhered to as required by §63.548(a). The SOP manual must, at a minimum, include the requirements of §63.548(c) and (d).	40 CFR 63.548(a)-(d)
5. The facility shall monitor and record the pressure drop across the HEPA filter system (Stack 14), daily. If the pressure drop is outside the limit specified by the filter manufacturer, maintenance inspections and/or corrective action are to be initiated according to the requirements in 40 CFR part 63, subpart X.	40 CFR 63.548(g)
6. A bag leak detection system(s) shall be operated in accordance with 40 CFR part 63, subpart X unless the Baghouses associated with these sources are equipped with HEPA filters.	40 CFR 63.548(c)(9)
7. The facility must install, operate and maintain a digital differential pressure monitoring system to continuously monitor each total enclosure.	Rule 335-3-1-.03
<i>Recordkeeping and Reporting Requirements</i>	
1. The facility shall comply with the recordkeeping and reporting requirements in §63.10.	40 CFR 63.550(a)
2. The facility shall comply with the recordkeeping and reporting requirements in §63.550.	40 CFR 63.550
3. The facility shall maintain a record of how many kettles are alloying at one time. The following records must be kept:	Rule 335-3-14-.04
(a) Date and time of alloying	
(b) Which kettles are alloying	
These records shall be maintained in a form suitable for inspection for a period of five (5) years.	

Federally Enforceable Provisos**Regulations**

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| 4. The Permittee shall maintain a record of all monitoring required by this permit. This shall include all problems observed and any corrective action taken. The records shall be maintained in a form suitable for inspection and shall be kept on site for a period of five (5) years. | Rule 335-3-16-.05 |
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Summary Page for Slag Treatment Facility (Stack 10)

Permitted

Operating Schedule: 24 Hrs/day x 7 Days/week x 52 Weeks/yr = 8760 Hrs/yr

Emission limitations:

Emission Point #	Description	Pollutant	Emission limit	Regulation
Stack 10	Slag Treatment Facility with Baghouse	PM	1.70 lb/hr	Rule 335-3-1-.03 (SIP)
		Pb	0.023 lb/hr AND	Rule 335-3-1-.03 (SIP)
			0.00043 gr/dscf	40 CFR 63.543(a)
		Pb*	0.008 lb/hr	Rule 335-3-1-.03 (SIP)
		Opacity	(see general provisos)	Rule 335-3-4-.01(1)

***Permittee shall be in compliance with the emission limit no later than October 1, 2019**

Provisos for Slag Treatment Facility (Stack 10)

Federally Enforceable Provisos	Regulations
<i>Applicability</i>	
1. This source has enforceable limits in place in order to provide for the attainment of the National Ambient Air Quality Standards.	Rule 335-3-1-.03
2. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-4-.15, "Control of Particulate Emissions from Secondary Lead Smelters."	Rule 335-3-4-.15
3. This source has enforceable requirements in place in order to prevent it from being subject to the provisions of ADEM Admin. Code r. 335-3-14-.04, "Air Permits Authorizing Construction in Clean Air Areas [Prevention of Significant Deterioration Permitting (PSD)]."	Rule 335-3-14-.04 [Anti-PSD]
4. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-16-.03, "Major Source Operating Permits."	Rule 335-3-16-.03
5. This source is subject to the applicable requirements of 40 CFR part 63, subpart X, "National Emission Standards for Hazardous Air Pollutants from Secondary Lead Smelting."	40 CFR 63.541(a) Rule 335-3-11-.06 (23)
6. This source is subject to the applicable requirements of 40 CFR part 63, subpart X, "General Provisions" as listed in Table 1 of subpart X.	Table 1 of subpart X
7. This source is subject to the applicable requirements of 40 CFR part 64, "Compliance Assurance Monitoring", to include General Proviso No. 33, for particulate matter.	40 CFR Part 64
<i>Emission Standards</i>	
1. Particulate Matter (PM) emissions from Stack 10 shall not exceed a mass emission rate of 1.70 lb/hr.	Rule 335-3-1-.03
2. Lead emissions from Stack 10 shall not exceed 0.00043 gr/dscf and a mass emission rate of 0.023 lb/hr.	Rule 335-3-1-.03 40 CFR 63.543(a)
3. No later than October 1, 2019, the lead emissions from Stack 10 shall not exceed a mass emission rate of 0.008 lb/hr.	Rule 335-3-1-.03
4. Untreated slag used for charging to the blast furnaces and untreated slag generated during periods when the slag treatment facility is inoperative may be stored in the Existing Raw Material Storage (ERMS) building.	Rule 335-3-14-.04 [Anti-PSD]
5. Except for personnel access, all exterior doors, with the exception of the vehicle entrance door and the access to the	Rule 335-3-14-.04 [Anti-PSD]

Federally Enforceable Provisos	Regulations
three slag delivery and pickup bins, will be kept closed at all times. The vehicle entrance door and the three slag delivery and pickup bins will be covered with PVC strips.	
6. Necessary maintenance measures will be implemented to ensure that PVC strip door coverings provide at least 90% coverage of the open areas.	Rule 335-3-14-.04 [Anti-PSD]
7. Slag awaiting analysis and stored in trucks outside the treatment facility will be covered to prevent entrainment.	Rule 335-3-14-.04 [Anti-PSD]
8. The slag treatment operations shall be operated in a total enclosure that is maintained at negative pressure at all times and vented to a control device designed to capture lead emissions.	40 CFR 63.544(a)
9. If an exceedance of the 2008 Lead National Ambient Air Quality Standard occurs during any three month period, Sanders Lead Company shall, within 180 days, complete and submit a plan to identify which stack or stacks will be raised and to what extent. Sanders Lead Company shall have the plan implemented within 18 months of the exceedance.	Rule 335-3-1-.03
<i>Compliance and Performance Test Methods and Procedures</i>	
1. Method 5 of 40 CFR part 60, appendix A shall be used in the determination of PM emissions.	Rule 335-3-1-.05
2. Method 9 of 40 CFR part 60, appendix A shall be used in the determination of opacity of the stack emissions.	Rule 335-3-1-.05
3. Method 12 or Method 29 of 40 CFR part 60, appendix A shall be used in the determination of lead compound emissions.	40 CFR 63.547(a)(5)
<i>Emission Monitoring</i>	
1. This source is subject to the applicable monitoring requirements in §63.548 of 40 CFR part 63, subpart X.	40 CFR 63.548
2. Compliance tests for lead emissions from Stack 10 shall be conducted according to the schedule specified in §63.543(g) of 40 CFR part 63, subpart X.	40 CFR 63.543(g)
3. Reference the Appendix for the monitoring requirements for 40 CFR part 64, "Compliance Assurance Monitoring."	40 CFR Part 64
4. A standard operating procedures (SOP) manual shall be prepared and adhered to as required by §63.548(a). The SOP manual must, at a minimum, include the requirements of §63.548(c) and (d).	40 CFR 63.548(a)-(d)

Federally Enforceable Provisos	Regulations
5. If the Baghouse (Stack 10) is equipped with HEPA filters in accordance with 40 CFR part 63, subpart X, the facility shall monitor and record the pressure drop across the HEPA filter system daily. If the pressure drop is outside the limit specified by the filter manufacturer, maintenance inspections and/or corrective action are to be initiated.	40 CFR 63.548(g)
6. A bag leak detection system shall be operated in accordance with 40 CFR part 63, subpart X unless the Baghouse (Stack 10) is equipped with HEPA filters.	40 CFR 63.548(c)(9)
7. The facility must install, operate and maintain a digital differential pressure monitoring system to continuously monitor each total enclosure.	Rule 335-3-1-.03
<i>Recordkeeping and Reporting Requirements</i>	
1. The facility shall comply with the recordkeeping and reporting requirements in §63.10.	40 CFR 63.550(a)
2. The facility shall comply with the recordkeeping and reporting requirements in §63.550.	40 CFR 63.550
3. The Permittee shall maintain a record of all monitoring required by this permit. This shall include all problems observed and any corrective action taken. The records shall be maintained in a form suitable for inspection and shall be kept on site for a period of five (5) years.	Rule 335-3-16-.05

**Summary Page for Blast Furnace Canopy Hoods and Building Ventilation (Stack
11)**

Permitted

Operating Schedule: 24 Hrs/day x 7 Days/week x 52 Weeks/yr = 8760 Hrs/yr

Emission limitations:

Emission Point #	Description	Pollutant	Emission limit	Regulation
Stack 11	Blast Furnace Canopy Hoods & Furnace Building Ventilation w/ Baghouse	PM	2.04 lb/hr	Rule 335-3-1-.03 (SIP)
		Pb	0.191 lb/hr AND 0.00043 gr/dscf	Rule 335-3-1-.03 (SIP) 40 CFR 63.543(a)
		Pb*	0.067 lb/hr	Rule 335-3-1-.03 (SIP)
		Opacity	(see general provisos)	Rule 335-3-4-.01(1)

***Permittee shall be in compliance with the emission limit no later than October 1, 2019**

Provisos for Blast Furnace Canopy Hoods and Building Ventilation (Stack 11)

Federally Enforceable Provisos	Regulations
<i>Applicability</i>	
1. This source has enforceable limits in place in order to provide for the attainment of the National Ambient Air Quality Standards.	Rule 335-3-1-.03
2. These sources are subject to the applicable requirements of ADEM Admin. Code r. 335-3-4-.15, " <i>Control of Particulate Emissions from Secondary Lead Smelters.</i> "	Rule 335-3-4-.15
3. These sources are subject to the applicable requirements of ADEM Admin. Code r. 335-3-16-.03, " <i>Major Source Operating Permits.</i> "	Rule 335-3-16-.03
4. These sources are subject to the applicable requirements of 40 CFR part 63, subpart X, " <i>National Emission Standards for Hazardous Air Pollutants from Secondary Lead Smelting.</i> "	40 CFR 63.541(a) Rule 335-3-11-.06 (23)
5. These sources are subject to the applicable requirements of 40 CFR part 63, subpart X, " <i>General Provisions</i> " as listed in Table 1 of subpart X.	Table 1 of subpart X
6. This source is subject to the applicable requirements of 40 CFR part 64, " <i>Compliance Assurance Monitoring</i> ", to include General Proviso No. 33, for particulate matter.	40 CFR Part 64
<i>Emission Standards</i>	
1. Particulate Matter (PM) emissions from Stack 11 shall not exceed a mass emission rate of 2.04 lb/hr.	Rule 335-3-1-.03
2. Lead emissions from Stack 11 shall not exceed 0.00043 gr/dscf and a mass emission rate of 0.191 lb/hr.	Rule 335-3-1-.03 40 CFR 63.543(a)
3. No later than October 1, 2019, the lead emissions from Stack 11 shall not exceed a mass emission rate of 0.067 lb/hr.	Rule 335-3-1-.03
4. This source shall be equipped with a secondary HEPA filter system downstream of the Baghouse associated with Stack 11.	Rule 335-3-1-.03
5. These sources shall be operated in a total enclosure that is maintained at negative pressure at all times and vented to a control device designed to capture lead emissions.	Rule 335-3-1-.03
6. The facility shall conduct all maintenance activities associated with contaminated equipment within enclosed areas. The facility shall install transfer points at the refining, smelting, and raw material storage building exits to contain leaded vehicles within the buildings. Contaminated	Rule 335-3-1-.03

Federally Enforceable Provisos	Regulations
<p>equipment leaving the enclosure shall be decontaminated prior to exiting the enclosure maintenance to a newly enclosed area and install transfer points at the refining, smelting, and raw material storage building exits to contain leaded vehicles within the buildings.</p>	
<p>7. If an exceedance of the 2008 Lead National Ambient Air Quality Standard occurs during any three month period, Sanders Lead Company shall, within 180 days, complete and submit a plan to identify which stack or stacks will be raised and to what extent. Sanders Lead Company shall have the plan implemented within 18 months of the exceedance.</p>	<p>Rule 335-3-1-.03</p>
<p><i>Compliance and Performance Test Methods and Procedures</i></p>	
<p>1. Method 5 of 40 CFR part 60, appendix A shall be used in the determination of PM emissions.</p>	<p>Rule 335-3-1-.05</p>
<p>2. Method 9 of 40 CFR part 60, appendix A shall be used in the determination of opacity of the stack emissions.</p>	<p>Rule 335-3-1-.05</p>
<p>3. Method 12 or 29 of 40 CFR part 60, appendix A shall be used in the determination of lead compound emissions.</p>	<p>40 CFR 63.547(a)(5)</p>
<p><i>Emission Monitoring</i></p>	
<p>1. This source is subject to the applicable monitoring requirements in §63.548 of 40 CFR part 63, subpart X.</p>	<p>40 CFR 63.548</p>
<p>2. Compliance tests for lead emissions from Stack 11 shall be conducted according to the schedule specified in §63.543(g) of 40 CFR part 63, subpart X.</p>	<p>40 CFR 63.543(g)</p>
<p>3. Reference the Appendix for the monitoring requirements for 40 CFR part 64, "Compliance Assurance Monitoring."</p>	<p>40 CFR Part 64</p>
<p>4. A standard operating procedures (SOP) manual shall be prepared and adhered to as required by §63.548(a). The SOP manual must, at a minimum, include the requirements of §63.548(c) and (d).</p>	<p>40 CFR 63.548(a)-(d)</p>
<p>5. The facility shall monitor and record the pressure drop across the HEPA filter system, daily. If the pressure drop is outside the limit specified by the filter manufacturer, maintenance inspections and/or corrective action are to be initiated according to the requirements in 40 CFR part 63, subpart X.</p>	<p>40 CFR 63.548(g)</p>
<p>6. The facility must install, operate and maintain a digital differential pressure monitoring system to continuously monitor each total enclosure.</p>	<p>Rule 335-3-1-.03</p>

Federally Enforceable Provisos	Regulations
<i>Recordkeeping and Reporting Requirements</i>	
1. The facility shall comply with the recordkeeping and reporting requirements in §63.10.	40 CFR 63.550(a)
2. The facility shall comply with the recordkeeping and reporting requirements in §63.550.	40 CFR 63.550
3. The Permittee shall maintain a record of all monitoring required by this permit. This shall include all problems observed and any corrective action taken. The records shall be maintained in a form suitable for inspection and shall be kept on site for a period of five (5) years.	Rule 335-3-16-.05

Summary Page for Battery Breaker/Shredder Building (Stack 12)

Permitted

Operating Schedule: 24 Hrs/day x 7 Days/week x 52 Weeks/yr = 8760 Hrs/yr

Emission limitations:

Emission Point #	Description	Pollutant	Emission limit	Regulation
Stack 12	Batter Breaker/Shredder Building w/ Baghouse	PM	1.78 lb/hr	Rule 335-3-1-.03 (SIP)
		Pb	0.044 lb/hr AND	Rule 335-3-1-.03 (SIP)
			0.00043 gr/dscf	40 CFR 63.543(a)
		Pb*	0.033 lb/hr	Rule 335-3-1-.03 (SIP)
		Opacity	(see general provisos)	Rule 335-3-4-.01(1)

***Permittee shall be in compliance with the emission limit no later than October 1, 2019**

Provisos for Battery Breaker/Shredder Building (Stack 12)

Federally Enforceable Provisos	Regulations
<i>Applicability</i>	
1. This source has enforceable limits in place in order to provide for the attainment of the National Ambient Air Quality Standards.	Rule 335-3-1-.03
2. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-4-.15, " <i>Control of Particulate Emissions from Secondary Lead Smelters.</i> "	Rule 335-3-4-.15
3. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-16-.03, " <i>Major Source Operating Permits.</i> "	Rule 335-3-16-.03
4. This source is subject to the applicable requirements of 40 CFR part 63, subpart X, " <i>National Emission Standards for Hazardous Air Pollutants from Secondary Lead Smelting.</i> "	40 CFR 63.541(a) Rule 335-3-11-.06 (23)
5. This source is subject to the applicable requirements of 40 CFR part 63, subpart X, " <i>General Provisions</i> " as listed in Table 1 of subpart X.	Table 1 of subpart X
<i>Emission Standards</i>	
1. Particulate Matter (PM) emissions from Stack 12 shall not exceed a mass emission rate 1.78 lb/hr.	Rule 335-3-1-.03
2. Lead emissions from Stack 12 shall not exceed 0.00043 gr/dscf and a mass emission rate of 0.044 lb/hr.	Rule 335-3-1-.03 40 CFR 63.543(a)
3. No later than October 1, 2019, the lead emissions from Stack 12 shall not exceed a mass emission rate of 0.033 lb/hr.	Rule 335-3-1-.03
4. This source shall be equipped with a secondary HEPA filter system downstream of the Baghouse associated with Stack 12.	Rule 335-3-1-.03
5. These sources shall be operated in a total enclosure that is maintained at negative pressure at all times and vented to a control device designed to capture lead emissions.	Rule 335-3-1-.03
6. The facility shall install a building connection tunnel for the transport of Group from the Battery Breaker-Shredder Building to the Raw Material Storage Building.	Rule 335-3-1-.03
7. If an exceedance of the 2008 Lead National Ambient Air Quality Standard occurs during any three month period, Sanders Lead Company shall, within 180 days, complete and submit a plan to identify which stack or stacks will be raised	Rule 335-3-1-.03

Federally Enforceable Provisos	Regulations
<p>and to what extent. Sanders Lead Company shall have the plan implemented within 18 months of the exceedance.</p>	
<p><i>Compliance and Performance Test Methods and Procedures</i></p>	
<p>1. Method 5 of 40 CFR part 60, appendix A shall be used in the determination of PM emissions.</p>	<p>Rule 335-3-1-.05</p>
<p>2. Method 9 of 40 CFR part 60, appendix A shall be used in the determination of opacity of the stack emissions.</p>	<p>Rule 335-3-1-.05</p>
<p>3. Method 12 or 29 of 40 CFR part 60, appendix A shall be used in the determination of lead compound emissions.</p>	<p>40 CFR 63.547(a)(5)</p>
<p><i>Emission Monitoring</i></p>	
<p>1. This source is subject to the applicable monitoring requirements in §63.548 of 40 CFR part 63, subpart X.</p>	<p>40 CFR 63.548</p>
<p>2. Compliance tests for lead emissions from Stack 12 shall be conducted according to the schedule specified in §63.543(g) of 40 CFR part 63, subpart X.</p>	<p>40 CFR 63.543(g)</p>
<p>3. A standard operating procedures (SOP) manual shall be prepared and adhered to as required by §63.548(a). The SOP manual must, at a minimum, include the requirements of §63.548(c) and (d).</p>	<p>40 CFR 63.548(a)-(d)</p>
<p>4. The facility shall monitor and record the pressure drop across the HEPA filter system, daily. If the pressure drop is outside the limit specified by the filter manufacturer, maintenance inspections and/or corrective action are to be initiated according to the requirements in 40 CFR part 63, subpart X.</p>	<p>40 CFR 63.548(g)</p>
<p>5. The facility must install, operate and maintain a digital differential pressure monitoring system to continuously monitor each total enclosure.</p>	<p>Rule 335-3-1-.03</p>
<p><i>Recordkeeping and Reporting Requirements</i></p>	
<p>1. The facility shall comply with the recordkeeping and reporting requirements in §63.10.</p>	<p>40 CFR 63.550(a)</p>
<p>2. The facility shall comply with the recordkeeping and reporting requirements in §63.550.</p>	<p>40 CFR 63.550</p>
<p>3. The Permittee shall maintain a record of all monitoring required by this permit. This shall include all problems observed and any corrective action taken. The records shall be maintained in a form suitable for inspection and shall be kept on site for a period of five (5) years.</p>	<p>Rule 335-3-16-.05</p>

Summary Page for Raw Material Storage Building (Stack 13)

Permitted

Operating Schedule: 24 Hrs/day x 7 Days/week x 52 Weeks/yr = 8760 Hrs/yr

Emission limitations:

Emission Point #	Description	Pollutant	Emission limit	Regulation
Stack 13	Raw Material Storage Building w/ Baghouse	PM	1.78 lb/hr	Rule 335-3-1-.03 (SIP)
		Pb	0.030 lb/hr AND	Rule 335-3-1-.03 (SIP)
			0.00043 gr/dscf	40 CFR 63.543(a)
		Pb*	0.022 lb/hr	Rule 335-3-1-.03 (SIP)
		Opacity	(see general provisos)	Rule 335-3-4-.01(1)

***Permittee shall be in compliance with the emission limit no later than October 1, 2019**

Provisos for Raw Material Storage Building (Stack 13)

Federally Enforceable Provisos	Regulations
<i>Applicability</i>	
1. This source has enforceable limits in place in order to provide for the attainment of the National Ambient Air Quality Standards.	Rule 335-3-1-.03
2. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-4-.15, " <i>Control of Particulate Emissions from Secondary Lead Smelters.</i> "	Rule 335-3-4-.15
3. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-16-.03, " <i>Major Source Operating Permits.</i> "	Rule 335-3-16-.03
4. This source is subject to the applicable requirements of 40 CFR part 63, subpart X, " <i>National Emission Standards for Hazardous Air Pollutants from Secondary Lead Smelting.</i> "	40 CFR 63.541(a) Rule 335-3-11-.06 (23)
5. This source is subject to the applicable requirements of 40 CFR part 63, subpart X, " <i>General Provisions</i> " as listed in Table 1 of subpart X.	Table 1 of subpart X
<i>Emission Standards</i>	
1. Particulate Matter (PM) emissions from Stack 13 shall not exceed a mass emission rate of 1.78 lb/hr.	Rule 335-3-1-.03
2. Lead emissions from Stack 13 shall not exceed 0.00043 gr/dscf and a mass emission rate of 0.030 lb/hr.	Rule 335-3-1-.03
3. No later than October 1, 2019, the lead emissions from Stack 13 shall not exceed a mass emission rate of 0.022 lb/hr.	Rule 335-3-1-.03
4. This source shall be equipped with a secondary HEPA filter system downstream of the Baghouse associated with Stack 13.	Rule 335-3-1-.03
5. These sources shall be operated in a total enclosure that is maintained at negative pressure at all times and vented to a control device designed to capture lead emissions.	Rule 335-3-1-.03
6. The facility shall install a building connection tunnel for the transport of Group from the Battery Breaker-Shredder Building to the Raw Material Storage Building.	Rule 335-3-1-.03
7. The facility shall conduct all maintenance activities associated with contaminated equipment within enclosed areas. Sanders Lead shall install transfer points at the refining, smelting, and raw material storage building exits to contain leaded vehicles within the buildings. Contaminated	Rule 335-3-1-.03

Federally Enforceable Provisos	Regulations
equipment leaving the enclosure shall be decontaminated prior to exiting the enclosure.	
8. If an exceedance of the 2008 Lead National Ambient Air Quality Standard occurs during any three month period, Sanders Lead Company shall, within 180 days, complete and submit a plan to identify which stack or stacks will be raised and to what extent. Sanders Lead Company shall have the plan implemented within 18 months of the exceedance.	Rule 335-3-1-.03
<i>Compliance and Performance Test Methods and Procedures</i>	
1. Method 5 of 40 CFR part 60, appendix A shall be used in the determination of PM emissions.	Rule 335-3-1-.05
2. Method 9 of 40 CFR part 60, appendix A shall be used in the determination of opacity of the stack emissions.	Rule 335-3-1-.05
3. Method 12 or 29 of 40 CFR part 60, appendix A shall be used in the determination of lead compound emissions.	40 CFR 63.547(a)(5)
<i>Emission Monitoring</i>	
1. This source is subject to the applicable monitoring requirements in §63.548 of 40 CFR part 63, subpart X.	40 CFR 63.548
2. Compliance tests for lead emissions from Stack 13 shall be conducted according to the schedule specified in §63.543(g) of 40 CFR part 63, subpart X.	40 CFR 63.543(g)
3. A standard operating procedures (SOP) manual shall be prepared and adhered to as required by §63.548(a). The SOP manual must, at a minimum, include the requirements of §63.548(c) and (d).	40 CFR 63.548(a)-(d)
4. The facility shall monitor and record the pressure drop across the HEPA filter system, daily. If the pressure drop is outside the limit specified by the filter manufacturer, maintenance inspections and/or corrective action are to be initiated according to the requirements in 40 CFR part 63, subpart X.	40 CFR 63.548(g)
5. The facility must install, operate and maintain a digital differential pressure monitoring system to continuously monitor each total enclosure.	Rule 335-3-1-.03
<i>Recordkeeping and Reporting Requirements</i>	
1. The facility shall comply with the recordkeeping and reporting requirements in §63.10.	40 CFR 63.550(a)
2. The facility shall comply with the recordkeeping and reporting requirements in §63.550.	40 CFR 63.550

Federally Enforceable Provisos	Regulations
<p>3. The Permittee shall maintain a record of all monitoring required by this permit. This shall include all problems observed and any corrective action taken. The records shall be maintained in a form suitable for inspection and shall be kept on site for a period of five (5) years.</p>	<p>Rule 335-3-16-.05</p>

Summary Page for Ammonia Injection Scrubber (Stack 15)

Permitted

Operating Schedule: 24 Hrs/day x 7 Days/week x 52 Weeks/yr = 8760 Hrs/yr

Emission limitations:

Emission Point #	Description	Pollutant	Emission limit	Regulation
Stack 15*	Blast Furnace No. 1 w/ Afterburner, Blast Furnace No. 2 w/ Afterburner, and Agglomeration Furnace vented to common Baghouse AND Blast Furnace No. 3 w/ Afterburner, Blast Furnace No. 4 w/ Afterburner vented to common Baghouse VENTED TO Ammonia Injection Scrubber	PM	5.28 lb/hr	Rule 335-3-1-.03 (SIP)
		SO ₂	315 lb/hr, based on a rolling 3-hour average	Rule 335-3-1-.03 (SIP)
		CO	1,300 lb/hr OR 975 lb/hr if only three furnaces are operating OR 650 lb/hr if only two furnaces are operating OR 325 lb/hr if only one furnace is operating	Rule 335-3-14-.04 (Anti-PSD)
		Opacity	Less than 20%	40 CFR 60.122(a)(2)
		Pb	0.258 lb/hr AND 0.00043 gr/dscf	Rule 335-3-1-.03 (SIP) 40 CFR 63.543(a)
		VOC (TGNMO)	66 lb/hr OR 50 lb/hr if only three furnaces are operating OR 34 lb/hr if only two furnaces are operating OR 17 lb/hr if only one furnace is operating	Rule 335-3-14-.04 (Anti-PSD)
		CO VOC (TGNMO)	1,300°F at the afterburner exit, based on a 3-hour average	Rule 335-3-14-.04 (Anti-PSD)
		THC	360 ppmv	40 CFR 63.543(d)
		D/F	170 ng/dscm	40 CFR 63.543(d)

***Permittee shall be in compliance with the requirements for Stack 15 no later than October 1, 2019**

Provisos for Ammonia Injection Scrubber (Stack 15)

Federally Enforceable Provisos	Regulations
<i>Applicability</i>	
1. This source has enforceable limits in place in order to provide for the attainment of the National Ambient Air Quality Standards.	Rule 335-3-1-.03
2. These sources are subject to the applicable requirements of ADEM Admin. Code r. 335-3-4-.15, <i>"Control of Particulate Emissions from Secondary Lead Smelters."</i>	Rule 335-3-4-.15
3. These sources are subject to the applicable requirements of ADEM Admin. Code r. 335-3-14-.04, <i>"Air Permits Authorizing Construction in Clean Air Areas [Prevention of Significant Deterioration Permitting (PSD)]."</i>	Rule 335-3-14-.04 [PSD/BACT]
4. This source has enforceable limits in place in order to prevent it from being subject to the provisions of ADEM Admin. Code r. 335-3-14-.04.	Rule 335-3-14-.04 [Anti-PSD]
5. These sources are subject to the applicable requirements of ADEM Admin. Code r. 335-3-16, <i>"Major Source Operating Permits."</i>	Rule 335-3-16-.03
6. These sources are subject to the applicable requirements of 40 CFR part 60, subpart L, <i>"Standards of Performance for Secondary Lead Smelters."</i>	40 CFR 60.120(a) Rule 335-3-10-.02 (12)
7. These sources are subject to the applicable requirements of 40 CFR part 60, subpart A, <i>"General Provisions."</i>	40 CFR 60.1(a)
8. These sources are subject to the applicable requirements of 40 CFR part 63, subpart X, <i>"National Emission Standards for Hazardous Air Pollutants from Secondary Lead Smelting."</i>	40 CFR 63.541(a) Rule 335-3-11-.06(23)
9. These sources are subject to the applicable requirements of 40 CFR part 63, subpart A, <i>"General Provisions"</i> as listed in Table 1 of subpart X.	Table 1 of subpart X
10. This source is subject to the applicable requirements of 40 CFR part 64, <i>"Compliance Assurance Monitoring"</i> , to include General Proviso No. 33, for particulate matter, carbon monoxide, volatile organic compounds, and sulfur dioxide.	40 CFR Part 64
<i>Emission Standards</i>	
1. Particulate Matter (PM) emissions from Stack 15 shall not exceed a mass emission rate of 5.28 lb/hr.	Rule 335-3-1-.03
2. Lead emissions from Stack 15 shall not exceed 0.00043 gr/dscf and a mass emission rate of 0.258 lb/hr.	Rule 335-3-1-.03 40 CFR 63.543(a)

Federally Enforceable Provisos	Regulations
3. Sulfur Dioxide (SO ₂) emissions from Stack 15 shall not exceed a mass emission rate of 315 lb/hr, based on a rolling three hour average.	Rule 335-3-1-.03
4. Volatile Organic Compound (VOC) emissions, as total gaseous non methane organics (TGNMO), from Stack 15 shall not exceed the following mass emission rates: (a) 17 lb/hr if one blast furnace is operating (b) 34 lb/hr if two blast furnaces are operating (c) 50 lb/hr if three blast furnaces are operating (d) 66 lb/hr if four blast furnaces are operating	Rule 335-3-14-.04 [Anti-PSD]
5. Carbon Monoxide (CO) emissions from Stack 15 shall not exceed the following mass emission rates: (a) 325 lb/hr if one blast furnace is operating (b) 650 lb/hr if two blast furnaces are operating (c) 975 lb/hr if three blast furnaces are operating (d) 1,300 lb/hr if four blast furnaces are operating	Rule 335-3-14-.04 [Anti-PSD]
6. The afterburner exit temperatures for the blast furnaces must be maintained at or above 1,300°F, based on a rolling three hour average.	Rule 335-3-14-.04 [Anti-PSD]
7. The opacity of emissions from Stack 15 and its associated sources shall not exceed that designated as 20% opacity.	40 CFR 60.122(a)(2)
8. Total Hydrocarbon (THC) emissions from Stack 15 shall not exceed 360 ppmv, expressed as propane corrected to 4% carbon dioxide.	40 CFR 63.543(d)
9. Dioxin and Furan (D/F) emissions from Stack 15 shall not exceed 170 nanograms/dscm, expressed as TEQ corrected to 7% O ₂ .	40 CFR 63.543(d)
10. These sources shall be operated in a total enclosure that is maintained at negative pressure at all times and vented to a control device(s) designed to capture lead emissions.	Rule 335-3-1-.03
11. The dust handling systems associated with Baghouse No. 1 and Baghouse No. 5 shall be enclosed to prevent fugitive emissions from these handling systems.	Rule 335-3-1-.03

Federally Enforceable Provisos	Regulations
12. If an exceedance of the 2008 Lead National Ambient Air Quality Standard occurs during any three month period, Sanders Lead Company shall, within 180 days, complete and submit a plan to identify which stack or stacks will be raised and to what extent. Sanders Lead Company shall have to plan implemented within 18 months of the exceedance.	Rule 335-3-1-.03
13. The Ammonia Injection Scrubber will be operational and Sanders Lead Company shall be in compliance with the above stated limits no later than October 1, 2019.	Rule 335-3-1-.03
<i>Compliance and Performance Test Methods and Procedures</i>	
1. Method 5 of 40 CFR part 60, appendix A shall be used in the determination of PM emissions.	Rule 335-3-1-.05
2. Method 6C of 40 CFR part 60, appendix A shall be used in the determination of SO ₂ emissions.	Rule 335-3-1-.05
3. Method 9 of 40 CFR part 60, appendix A shall be used in the determination of opacity of the stack emissions.	Rule 335-3-1-.05
4. Method 9 of 40 CFR part 60, appendix A, excluding Section 2.5, shall be used in the determination of opacity of emissions escaping the capture system from the charge doors, slag traps, and lead traps.	Rule 335-3-4-.15(6)
5. Method 10 of 40 CFR part 60, appendix A shall be used in the determination of CO emissions.	Rule 335-3-1-.05
6. Method 25 of 40 CFR part 60, appendix A shall be used in the determination of VOC (TGNMO) emissions.	Rule 335-3-1-.05
7. Method 12 or 29 of 40 CFR part 60, appendix A shall be used in the determination of lead compound emissions.	40 CFR 63.547(a)(5)
8. Method 25A of 40 CFR part 60, appendix A shall be used in the determination of THC emissions.	40 CFR 63.547(b)(4)
9. For purposes of determining compliance with the THC limit, the procedures in §63.547(c) shall be used.	40 CFR 63.547(c)
10. Method 23 of 40 CFR part 60, appendix A shall be used in the determination of D/F emissions.	40 CFR 63.547(d)(5)
11. For purposes of determining compliance with the D/F limit, the procedures in §63.547(e) shall be used.	40 CFR 63.547(e)
<i>Emission Monitoring</i>	
1. This source is subject to the monitoring requirements in §63.548 of 40 CFR part 63, subpart X.	40 CFR 63.548

Federally Enforceable Provisos	Regulations
2. Compliance tests for lead emissions from Stack 15 shall be conducted according to the schedule specified in §63.543(g) of 40 CFR part 63, subpart X.	40 CFR 63.543(g)
3. Compliance tests for THC emissions from Stack 15 shall be conducted according to the schedule specified in §63.543(h) of 40 CFR part 63, subpart X.	40 CFR 63.543(h)
4. Compliance tests for D/F emissions from Stack 15 shall be conducted at least once every 6 years.	40 CFR 63.543(i)
5. Reference the Appendix for the monitoring requirements for 40 CFR part 64, <i>"Compliance Assurance Monitoring."</i>	40 CFR Part 64
6. The installed Continuous Opacity Monitoring Systems (COMS) for the Baghouses exhausted to the wet scrubber will be operated and maintained according to the procedures in Performance Specification 1 of 40 CFR part 60, appendix B. COMS data will be used to demonstrate compliance with the opacity standard.	Rule 335-3-14-.04
7. The installed Continuous Emissions Monitor System (CEMS) for Stack 15 will be operated and maintained according to the procedures in Performance Specification 2 of 40 CFR part 60, appendix B. CEMS data will be used to demonstrate compliance with the SO ₂ standard.	Rule 335-3-14-.04
8. The temperature of the gas stream at the exit of each afterburner shall be continuously monitored by a device operated in accordance with the provisions in §63.8 and §63.548(j).	40 CFR 63.548(j)(1)-(4)
9. A standard operating procedures (SOP) manual shall be prepared and adhered to as required by §63.548(a). The SOP manual must, at a minimum, include the requirements of §63.548(c) and (d).	40 CFR 63.548(a)-(d)
10. The facility shall establish a normal pressure differential across the scrubber and monitor and record the pressure differential at least once per shift.	Rule 335-3-14-.04
11. Ambient air monitoring for sulfur dioxide must be conducted for the plant for which this permit is issued once the wet scrubber system is installed and operational, but no later than October 1, 2019. The type, number, and location of these instruments must be approved by the Director. Collected data is to be submitted to this agency in a format and at a frequency specified by the Director.	Rule 335-3-14-.04
12. The facility must install, operate and maintain a digital differential pressure monitoring system to continuously monitor each total enclosure.	Rule 335-3-1-.03

Federally Enforceable Provisos	Regulations
<i>Recordkeeping and Reporting Requirements</i>	
<p>1. All upsets, accidents, or other events that create or cause higher than expected lead-bearing emissions that may impact ambient air quality will be reported to the Department. A monthly summary report of these events will be submitted to the Department no later than the tenth day of the following month. In the event that no upsets occur, a letter to that effect will be submitted to the Department for that month.</p>	Rule 335-3-14-.04
<p>2. An Excess Emissions report for Stack 1 shall be submitted to the Department quarterly. The report will include the following information:</p> <p>(a) <i>Opacity:</i> The magnitude of excess emissions of 20% as computed from 6-minute averages.</p> <p><i>SO₂:</i> Emission rates over 315 lb/hr as computed from a rolling 3-hour average.</p> <p><i>Afterburner Exit Temperature:</i> Each value below 1,300°F as computed from a rolling 3-hour average.</p> <p><i>Note:</i> Data recorded during periods of monitor system breakdowns, maintenance, adjustments, and calibration checks shall not be included in any of the above data averages.</p> <p>(b) The date and time each excess emissions event commenced and ended.</p> <p>(c) The nature and cause of the excess emissions (if known) and the corrective action(s) taken or preventative measure(s) adopted.</p> <p>(d) The date and time of each period during which any of the monitors were inoperative (excepting zero and span checks) and the nature of the repairs or adjustments.</p> <p>(e) The equations used to convert SO₂ emissions data as monitored to the required reporting standard (lb/hr).</p> <p>(f) If, during a reporting period, no excess emission events occur and the monitoring systems are operable at all times, a statement to that effect will be included in the report.</p> <p>(g) The report will be submitted according to the following schedule:</p>	Rule 335-3-14-.04

Federally Enforceable Provisos		Regulations
	<u>Reporting Period</u> <i>January 1st through March 31st</i> <i>April 1st through June 30th</i> <i>July 1st through September 30th</i> <i>October 1st through December 31st</i>	<u>Submittal Date</u> <i>April 30th</i> <i>July 30th</i> <i>October 30th</i> <i>January 30th</i>
3.	Should the emissions from Stack 15 exceed a 6-minute average opacity of 20%, the Department will be notified immediately. A decision will be made as to whether operations can continue or must be suspended until corrective measures are taken.	Rule 335-3-14-.04
4.	The facility shall maintain a record of when each furnace is operating.	Rule 335-3-14-.04
5.	The facility shall maintain a record of the pressure drop across the scrubber. This shall include all problems observed and corrective action taken.	Rule 335-3-14-.04
6.	The facility shall comply with the recordkeeping and recording requirements in §63.10.	40 CFR 63.550(a)
7.	The facility shall comply with the recordkeeping and recording requirements in §63.550.	40 CFR 63.550
8.	All records shall be maintained for a period of at least five (5) years in a form suitable for inspection.	Rule 335-3-14-.04

Appendix CAM

CO and VOC Compliance Plan for Blast Furnaces 1 & 2 Afterburners (Stack 1)

	Indicator 1	Indicator 2
I. Indicator	Afterburner exit temperature	Work Practice
Measurement Approach	The exit temperature is monitored with a thermocouple	Inspection and tuning of the burner system, inspection of the data recorder.
II. Indicator Range	An excursion is defined as more than 50°F drop below the average temperature recorded during the most recent compliance test , based on a running three hour average	An excursion is defined as failure to perform or document annual burner inspection or daily thermocouple system inspection.
III. Performance Criteria		
A. Data Representativeness	The thermocouple is located in the afterburner chamber at the afterburner exit. The accuracy of the thermocouple is $\pm 2.5^{\circ}\text{F}$ or 0.1% of the range. The range is 0 to 2,500°F. The recorded sensitivity is 0.1°F.	Not Applicable
B. Verification of Operation Status	Not Applicable	Not Applicable
C. QA/QC Practices and Criteria	Accuracy of the thermocouple will be verified by a second redundant NIST-traceable thermocouple inserted adjacent to the primary thermocouple, once each day. (The two readings must agree within 15°F.)	Not Applicable
D. Monitoring Frequency	Measured continuously.	Annual inspection and tuning of the burner system, daily thermocouple system inspection
E. Data Collection Procedures	Chart recorder records data continuously and data logger records instantaneous readings every 15-minutes along with 15-minute and 3-hour averages every 15 minutes.	Record results of annual inspection and tuning of the burner system and the daily thermocouple system inspection
F. Averaging Period	Fifteen minute and 3-hour average	Not Applicable

PM Compliance Plan for Stack 1 Baghouse

	Indicator 1	Indicator 2 (BLD)	Indicator 3
I. Indicator	Opacity	Triboelectric Signal	Inspection/Maintenance
Measurement Approach	COMs operated on primary scale as an opacity monitor. Primary scale: 0 – 100% opacity for permit limit compliance.	Triboelectric Monitor. An Audible alarm sounds when the signal exceeds a preset point, indicating a possible bag leak or malfunction.	Various baghouse system operation and maintenance inspections are conducted within prescribed intervals, per MACT SOP manual.
II. Indicator Range	An excursion is defined as an opacity measurement exceeding 10.0% on a 6-minute average (50% of visible emission limit). Excursions trigger an inspection, corrective action, and a reporting requirement.	An excursion is defined as a triboelectric signal greater than 75 percent of scale for 7.5 seconds. Excursions triggers review of chart record to determine extent of need for inspection, corrective action, and recordkeeping per MACT SOP manual.	An excursion is defined as failure to perform inspections per MACT SOP manual or to take action following report of necessary maintenance.
III. Performance Criteria			
A. Data Representativeness	COMs located at the baghouse outlet.	The probe sensor is located in the baghouse exit stack. The triboelectric signal is proportional to particulate mass flow if factors such as humidity, exhaust gas velocity, and particle size remain constant.	Per MACT SOP
B. Verification of Operation Status	Not Applicable	Not Applicable	Not Applicable
C. QA/QC Practices and Criteria	Calibrate, maintain in accordance with manufacturer's specifications, 40 CFR 60.13, and Appendix B,	Initial adjustments for alarm set point and alarm delay time conducted using concepts of EPA's written guidance for triboelectric monitors.	Trained personnel to perform maintenance and inspections.
D. Monitoring Frequency	Measured continuously.	Measured continuously.	Per MACT SOP
E. Data Collection Procedures	Opacity output signal and alarm times are continuously recorded on a strip chart.	Triboelectric signal and record of alarm times are continuously recorded on a strip chart, with any notes on alarms transcribed manually.	Per MACT SOP
F. Averaging Period	Six minute averages	Instantaneous	Not Applicable

PM Compliance Plan for Sanitary Baghouses (Stack 4 and Stack 4a)

	Indicator 1 (BLD)	Indicator 1 (HEPA)	Indicator 2
I. Indicator	Triboelectric Signal	HEPA Pressure Drop	Inspection/Maintenance
Measurement Approach	<p>Triboelectric Monitor.</p> <p>An Audible alarm sounds when the signal exceeds a preset point, indicating a possible bag leak or malfunction.</p>	<p>Pressure Drop across the HEPA filter is measured with a Magnehelic Pressure Gauge</p>	<p>Various baghouse system operation and maintenance inspections are conducted within prescribed intervals, per MACT SOP manual.</p>
II. Indicator Range	<p>An excursion is defined as a triboelectric signal greater than 75 percent of scale for 7.5 seconds. Excursions triggers review of chart record to determine extent of need for inspection, corrective action, and recordkeeping per MACT SOP manual.</p>	<p>While the unit is operating, an excursion is defined as a pressure differential below 0.5 inches of H₂O and greater than 5.0 inches of H₂O. Excursions trigger an inspection, corrective action, and a reporting requirement.</p>	<p>An excursion is defined as failure to perform inspections per MACT SOP manual or failure to take action following report of necessary maintenance.</p>
III. Performance Criteria			
A. Data Representativeness	<p>The probe sensor is located in the baghouse exit stack. The triboelectric signal is proportional to particulate mass flow if factors such as humidity, exhaust gas velocity, and particle size remain constant.</p>	<p>The magnehelic measures the pressure differential between the inlet and outlet of the HEPA filter system.</p>	<p>Per MACT SOP</p>
B. Verification of Operation Status	Not Applicable	Not Applicable	Not Applicable
C. QA/QC Practices and Criteria	<p>Initial adjustments for alarm set point and alarm delay time conducted using concepts of EPA's written guidance for triboelectric monitors.</p>	<p>Quarterly inspection of the pressure taps located at the HEPA inlet and outlet.</p>	<p>Trained personnel to perform maintenance and inspections.</p>
D. Monitoring Frequency	Measured continuously.	At least once daily	Per MACT SOP
E. Data Collection Procedures	<p>Triboelectric signal and record of alarm times are continuously recorded on a strip chart, with any notes on alarms transcribed manually.</p>	<p>The pressure drop will be recorded with date and time.</p>	<p>Per MACT SOP</p>
F. Averaging Period	Instantaneous	Instantaneous	Not Applicable

CO and VOC Compliance Plan for Blast Furnaces 3 & 4 Afterburners (Stack 5)

	Indicator 1	Indicator 2
I. Indicator	Afterburner exit temperature	Work Practice
Measurement Approach	The exit temperature is monitored with a thermocouple	Inspection and tuning of the burner system, inspection of the data recorder.
II. Indicator Range	An excursion is defined as more than 50°F drop below the average temperature recorded during the most recent compliance test , based on a running three hour average	An excursion is defined as failure to perform or document annual burner inspection or daily thermocouple system inspection.
III. Performance Criteria		
A. Data Representativeness	The thermocouple is located in the afterburner chamber at the afterburner exit. The accuracy of the thermocouple is $\pm 2.5^{\circ}\text{F}$ or 0.1% of the range. The range is 0 to 2,500°F. The recorded sensitivity is 0.1°F.	Not Applicable
B. Verification of Operation Status	Not Applicable	Not Applicable
C. QA/QC Practices and Criteria	Accuracy of the thermocouple will be verified by a second redundant NIST-traceable thermocouple inserted adjacent to the primary thermocouple, once each day. (The two readings must agree within 15°F.)	Not Applicable
D. Monitoring Frequency	Measured continuously.	Annual inspection and tuning of the burner system, daily thermocouple system inspection
E. Data Collection Procedures	Chart recorder records data continuously and data logger records instantaneous readings every 15-minutes along with 15-minute and 3-hour averages every 15 minutes.	Record results of annual inspection and tuning of the burner system and the daily thermocouple system inspection
F. Averaging Period	Fifteen minute and 3-hour average	Not Applicable

PM Compliance Plan for Stack 5 Baghouse

	Indicator 1	Indicator 2 (BLD)	Indicator 3
I. Indicator	Opacity	Triboelectric Signal	Inspection/Maintenance
Measurement Approach	COMs operated on primary scale as an opacity monitor. Primary scale: 0 – 100% opacity for permit limit compliance.	Triboelectric Monitor. An Audible alarm sounds when the signal exceeds a preset point, indicating a possible bag leak or malfunction.	Various baghouse system operation and maintenance inspections are conducted within prescribed intervals, per MACT SOP manual.
II. Indicator Range	An excursion is defined as an opacity measurement exceeding 10.0% on a 6-minute average (50% of visible emission limit). Excursions trigger an inspection, corrective action, and a reporting requirement.	An excursion is defined as a triboelectric signal greater than 75 percent of scale for 7.5 seconds. Excursions triggers review of chart record to determine extent of need for inspection, corrective action, and recordkeeping per MACT SOP manual.	An excursion is defined as failure to perform inspections per MACT SOP manual or to take action following report of necessary maintenance.
III. Performance Criteria			
A. Data Representativeness	COMs located at the baghouse outlet.	The probe sensor is located in the baghouse exit stack. The triboelectric signal is proportional to particulate mass flow if factors such as humidity, exhaust gas velocity, and particle size remain constant.	Per MACT SOP
B. Verification of Operation Status	Not Applicable	Not Applicable	Not Applicable
C. QA/QC Practices and Criteria	Calibrate, maintain in accordance with manufacturer's specifications, 40 CFR 60.13, and Appendix B,	Initial adjustments for alarm set point and alarm delay time conducted using concepts of EPA's written guidance for triboelectric monitors.	Trained personnel to perform maintenance and inspections.
D. Monitoring Frequency	Measured continuously.	Measured continuously.	Per MACT SOP
E. Data Collection Procedures	Opacity output signal and alarm times are continuously recorded on a strip chart.	Triboelectric signal and record of alarm times are continuously recorded on a strip chart, with any notes on alarms transcribed manually.	Per MACT SOP
F. Averaging Period	Six minute averages	Instantaneous	Not Applicable

PM Compliance Plan for Slag Treatment Facility Baghouse (Stack 10)

	Indicator 1 (BLD)	Indicator 1 (HEPA)	Indicator 2
I. Indicator	Triboelectric Signal	HEPA Pressure Drop	Inspection/Maintenance
Measurement Approach	<p>Triboelectric Monitor.</p> <p>An Audible alarm sounds when the signal exceeds a preset point, indicating a possible bag leak or malfunction.</p>	<p>Pressure Drop across the HEPA filter is measured with a Magnehelic Pressure Gauge</p>	<p>Various baghouse system operation and maintenance inspections are conducted within prescribed intervals, per MACT SOP manual.</p>
II. Indicator Range	<p>An excursion is defined as a triboelectric signal greater than 75 percent of scale for 7.5 seconds. Excursions triggers review of chart record to determine extent of need for inspection, corrective action, and recordkeeping per MACT SOP manual.</p>	<p>While the unit is operating, an excursion is defined as a pressure differential below 0.5 inches of H₂O and greater than 5.0 inches of H₂O. Excursions trigger an inspection, corrective action, and a reporting requirement.</p>	<p>An excursion is defined as failure to perform inspections per MACT SOP manual or failure to take action following report of necessary maintenance.</p>
III. Performance Criteria			
A. Data Representativeness	<p>The probe sensor is located in the baghouse exit stack. The triboelectric signal is proportional to particulate mass flow if factors such as humidity, exhaust gas velocity, and particle size remain constant.</p>	<p>The magnehelic measures the pressure differential between the inlet and outlet of the HEPA filter system.</p>	<p>Per MACT SOP</p>
B. Verification of Operation Status	Not Applicable	Not Applicable	Not Applicable
C. QA/QC Practices and Criteria	<p>Initial adjustments for alarm set point and alarm delay time conducted using concepts of EPA's written guidance for triboelectric monitors.</p>	<p>Quarterly inspection of the pressure taps located at the HEPA inlet and outlet.</p>	<p>Trained personnel to perform maintenance and inspections.</p>
D. Monitoring Frequency	Measured continuously.	At least once daily	Per MACT SOP
E. Data Collection Procedures	<p>Triboelectric signal and record of alarm times are continuously recorded on a strip chart, with any notes on alarms transcribed manually.</p>	<p>The pressure drop will be recorded with date and time.</p>	<p>Per MACT SOP</p>
F. Averaging Period	Instantaneous	Instantaneous	Not Applicable

*PM Compliance Plan for Canopy Hoods and Furnace Building Ventilation Baghouse
(Stack 11)*

	Indicator 1	Indicator 2
I. Indicator	HEPA Pressure Drop	Inspection/Maintenance
Measurement Approach	Pressure Drop across the HEPA filter is measured with a Magnehelic Pressure Guage	Various baghouse system operation and maintenance inspections are conducted within prescribed intervals, per MACT SOP manual.
II. Indicator Range	While the unit is operating, an excursion is defined as a pressure differential below 0.5 inches of H ₂ O and greater than 5.0 inches of H ₂ O. Excursions trigger an inspection, corrective action, and a reporting requirement.	An excursion is defined as failure to perform inspections per MACT SOP manual or failure to take action following report of necessary maintenance.
III. Performance Criteria		
A. Data Representativeness	The magnehelic measures the pressure differential between the inlet and outlet of the HEPA filter system.	Per MACT SOP
B. Verification of Operation Status	Not Applicable	Not Applicable
C. QA/QC Practices and Criteria	Quarterly inspection of the pressure taps located at the HEPA inlet and outlet.	Trained personnel to perform maintenance and inspections.
D. Monitoring Frequency	At least once daily	Per MACT SOP
E. Data Collection Procedures	The pressure drop will be recorded with date and time.	Per MACT SOP
F. Averaging Period	Instantaneous	Not Applicable

PM Compliance Plan for Alloying Kettles and Alloying Kettle Heating System Baghouse (Stack 14)

	Indicator 1	Indicator 2
I. Indicator	HEPA Pressure Drop	Inspection/Maintenance
Measurement Approach	Pressure Drop across the HEPA filter is measured with a Magnehelic Pressure Guage	Various baghouse system operation and maintenance inspections are conducted within prescribed intervals, per MACT SOP manual.
II. Indicator Range	While the unit is operating, an excursion is defined as a pressure differential below 0.5 inches of H ₂ O and greater than 5.0 inches of H ₂ O. Excursions trigger an inspection, corrective action, and a reporting requirement.	An excursion is defined as failure to perform inspections per MACT SOP manual or failure to take action following report of necessary maintenance.
III. Performance Criteria		
A. Data Representativeness	The magnehelic measures the pressure differential between the inlet and outlet of the HEPA filter system.	Per MACT SOP
B. Verification of Operation Status	Not Applicable	Not Applicable
C. QA/QC Practices and Criteria	Quarterly inspection of the pressure taps located at the HEPA inlet and outlet.	Trained personnel to perform maintenance and inspections.
D. Monitoring Frequency	At least once daily	Per MACT SOP
E. Data Collection Procedures	The pressure drop will be recorded with date and time.	Per MACT SOP
F. Averaging Period	Instantaneous	Not Applicable

CO and VOC Compliance Plan for Blast Furnaces 1, 2, 3, & 4 Afterburners (Stack 15)

	Indicator 1	Indicator 2
I. Indicator	Afterburner exit temperature	Work Practice
Measurement Approach	The exit temperature is monitored with a thermocouple	Inspection and tuning of the burner system, inspection of the data recorder.
II. Indicator Range	An excursion is defined as more than 50°F drop below the average temperature recorded during the most recent compliance test , based on a running three hour average	An excursion is defined as failure to perform or document annual burner inspection or daily thermocouple system inspection.
III. Performance Criteria		
A. Data Representativeness	The thermocouple is located in the afterburner chamber at the afterburner exit. The accuracy of the thermocouple is $\pm 2.5^{\circ}\text{F}$ or 0.1% of the range. The range is 0 to 2,500°F. The recorded sensitivity is 0.1°F.	Not Applicable
B. Verification of Operation Status	Not Applicable	Not Applicable
C. QA/QC Practices and Criteria	Accuracy of the thermocouple will be verified by a second redundant NIST-traceable thermocouple inserted adjacent to the primary thermocouple, once each day. (The two readings must agree within 15°F.)	Not Applicable
D. Monitoring Frequency	Measured continuously.	Annual inspection and tuning of the burner system, daily thermocouple system inspection
E. Data Collection Procedures	Chart recorder records data continuously and data logger records instantaneous readings every 15-minutes along with 15-minute and 3-hour averages every 15 minutes.	Record results of annual inspection and tuning of the burner system and the daily thermocouple system inspection
F. Averaging Period	Fifteen minute and 3-hour average	Not Applicable

PM Compliance Plan for Baghouses Vented to Stack 15

	Indicator 1	Indicator 2 (BLD)	Indicator 3
I. Indicator	Opacity	Triboelectric Signal	Inspection/Maintenance
Measurement Approach	COMs operated on primary scale as an opacity monitor. Primary scale: 0 – 100% opacity for permit limit compliance.	Triboelectric Monitor. An Audible alarm sounds when the signal exceeds a preset point, indicating a possible bag leak or malfunction.	Various baghouse system operation and maintenance inspections are conducted within prescribed intervals, per MACT SOP manual.
II. Indicator Range	An excursion is defined as an opacity measurement exceeding 10.0% on a 6-minute average (50% of visible emission limit). Excursions trigger an inspection, corrective action, and a reporting requirement.	An excursion is defined as a triboelectric signal greater than 75 percent of scale for 7.5 seconds. Excursions triggers review of chart record to determine extent of need for inspection, corrective action, and recordkeeping per MACT SOP manual.	An excursion is defined as failure to perform inspections per MACT SOP manual or to take action following report of necessary maintenance.
III. Performance Criteria			
A. Data Representativeness	COMs located at the baghouse outlet.	The probe sensor is located in the baghouse exit duct. The triboelectric signal is proportional to particulate mass flow if factors such as humidity, exhaust gas velocity, and particle size remain constant.	Per MACT SOP
B. Verification of Operation Status	Not Applicable	Not Applicable	Not Applicable
C. QA/QC Practices and Criteria	Calibrate, maintain in accordance with manufacturer's specifications, 40 CFR 60.13, and Appendix B,	Initial adjustments for alarm set point and alarm delay time conducted using concepts of EPA's written guidance for triboelectric monitors.	Trained personnel to perform maintenance and inspections.
D. Monitoring Frequency	Measured continuously.	Measured continuously.	Per MACT SOP
E. Data Collection Procedures	Opacity output signal and alarm times are continuously recorded on a strip chart.	Triboelectric signal and record of alarm times are continuously recorded on a strip chart, with any notes on alarms transcribed manually.	Per MACT SOP
F. Averaging Period	Six minute averages	Instantaneous	Not Applicable

SO₂ Compliance Plan for Ammonia Injection Scrubber (Stack 15)

	Indicator 1	Indicator 2
I. Indicator	SO ₂ Emission Rate	Pressure Drop
Measurement Approach	Continuous Emissions Monitor System (CEMS)	Differential Pressure Gauge
II. Indicator Range	An excursion is defined as a SO ₂ emission rate greater than 315 lb/hr, based on a rolling 3-hour average. Excursions trigger an inspection, corrective action, and a reporting requirement.	An excursion is defined as a pressure differential below or above the range established by the facility. Excursions trigger an inspection, corrective action, and a reporting requirement.
III. Performance Criteria		
A. Data Representativeness	The CEMS will be located in the scrubber stack.	The pressure differential gauge measures the pressure differential between the inlet and outlet of the scrubber.
B. Verification of Operation Status	Not Applicable	Not Applicable
C. QA/QC Practices and Criteria	Calibrate, operate, and maintain in accordance with 40 CFR 60.13; part 60, appendix B, PS-2; and part 60, appendix F.	The pressure gauge must be calibrated, operated, and maintained according to the manufacturer's guidance.
D. Monitoring Frequency	Measured continuously.	Measured once per shift.
E. Data Collection Procedures	SO ₂ concentration and flow rate continuously monitored; used to calculate emission rate in lb/hr on 3-hour average basis.	The pressure differential will be recorded with date and time.
F. Averaging Period	Rolling 3-hour average	Instantaneous